

**EVALUATION OF THE PHASE I CONSTRUCTION STORM WATER
COMPLIANCE AND ENFORCEMENT PROGRAM**

Prepared for:

U.S. Environmental Protection Agency
Office of Enforcement and Compliance Assurance
Office of Planning, Policy, Analysis and Communication

Prepared by:

Industrial Economics, Incorporated
2067 Massachusetts Avenue
Cambridge, MA 02140
617-354-0074

Kerr, Greiner & Associates, Inc.
2634 Wild Cherry Place
Reston, VA 20191
703-476-0710

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EXECUTIVE SUMMARY

BACKGROUND AND METHODOLOGY

Storm water runoff from construction sites is a significant source of sediments, nutrients, and other pollutants that impair water quality in the United States. In order to address the impacts of construction storm water, EPA's Office of Enforcement and Compliance Assurance (OECA) has overseen a multi-year effort to improve compliance with storm water regulations and reduce runoff pollution from construction sites. Beginning in 1992, owners and operators of large construction sites (those disturbing five or more acres) have been required to obtain a permit for discharging storm water, prepare a site-specific storm water pollution prevention plan (SWPPP), and install and maintain site-specific best management practices (BMPs) that prevent discharge of sediment and other pollutants off site. On January 18, 2000, OECA issued a compliance and enforcement strategy that prioritized storm water enforcement efforts targeted to industrial facilities, including large construction sites. Since that time, OECA has developed a range of strategies, initiatives, and tools to promote compliance with storm water regulations in the construction industry and to support co-regulators at Regional, State, and local levels. OECA is interested in reviewing the program to see how well it is meeting its goals.

Industrial Economics, Inc (IEc) and Kerr, Greiner & Associates, Inc. (Kerr) evaluated OECA's construction storm water program for Phase I construction sites (i.e., those equaling five acres or more) since 2000. The evaluation was designed to answer several key questions about OECA's storm water program for these large construction sites:

1. What is the level of compliance with storm water regulations in the construction industry? (*Level of Compliance*)
2. What effect are OECA's key policies having on the ability of EPA Regions and States to implement the Phase I storm water compliance and enforcement program; and on the behavior of the construction industry? (*Key Strategies and Policies*)
3. Are EPA's compliance assistance materials being used? If so, how are they being used and are they effective? (*Compliance Assistance*)

4. What is the level of compliance monitoring done by EPA? (*Compliance Monitoring*)
5. How is enforcement being conducted in this sector and is it effective? (*Enforcement*)
6. How does OECA foster effective sharing of information and resources to leverage Regional and State resources? (*Collaboration and Data Sharing*)

The main source of data for the evaluation was a series of in-person or telephone discussions with regulators, industry, and environmental groups. They include staff at EPA Headquarters from OECA and the Office of Water (OW), representatives of all ten EPA Regions, representatives of eight State agencies, two industry trade associations, three individual contractors, and four environmental non-governmental organizations (NGOs). IEc and Kerr reviewed key program documents and other relevant information.

KEY FINDINGS

The review demonstrates OECA is committed to ensuring compliance with Phase I construction storm water requirements, and that there are opportunities for OECA to improve its program through increased collaboration with co-regulators and an adaptation of compliance strategies specifically tailored to Phase I construction sites. The findings are presented below, organized by the topics addressed in the evaluation questions.

Level of Compliance

- ***Trends in compliance:*** Regions and States report that awareness of permitting requirements has increased in the construction industry, particularly in 2003 and 2004. NGO respondents, question, however, whether increased awareness is resulting in greater compliance.
- ***Lack of data limits analysis of compliance:*** Due to lack of data, we could not reach conclusions on the extent of permit coverage or compliance for Phase I construction sites. Without readily-available nationwide data regarding the number of sites subject to Phase I requirements, it is not possible to determine what percentage of regulated construction sites are covered by a Phase I NPDES construction storm water permit. The second level of inquiry beyond permit coverage involves determining what percentage of the permitted universe is in compliance with the storm water requirements. Again, there are no readily available data on the percentage of the permitted universe in compliance with requirements.

Key Strategies and Policies

- ***Effect of OECA's key strategies and policies on Regions:*** OECA's strategies have generally affirmed approaches Regions were taking to the Phase I storm water program and provided a road map for their programs. Some Regions have shifted their approaches in response to the strategies. For example, the 2003 Storm Water Compliance and Enforcement Strategy caused several Regions to focus more on storm water, construction, compliance assistance, or

watersheds. Most Regions are using at least some of the tools developed as part of the 2003 strategy, such as the Expedited Settlement Offer tool and the supplemental guidance for applying the CWA penalty policy to storm water. Regions generally tend to value Headquarters initiatives that they believe build on the experience and perspectives of Regional efforts, but some Regions feel that OECA's initiatives can be intrusive or not responsive to Regional needs.

- ***Effect of OECA's key strategies and policies on States:*** States are indirectly affected by OECA's strategies through interactions with the Regions, and therefore they do not directly comment on the strategies.

Compliance Assistance

- ***Extent of use of OECA's compliance assistance materials:*** OECA's compliance assistance materials are used more by Regions than by authorized States. States focus on providing their own materials to the construction industry that reflect State-specific programs and requirements; their use of EPA headquarters materials is limited. Some Regions prefer their own compliance assistance materials to those developed by Headquarters, and in the Regions that make active use of the Headquarters materials, a few materials have garnered most of the attention. These include the Construction Industry Compliance Assistance (CICA) website, "Stormwater and the Construction Industry" poster and the brochure, "Does Your Construction Site Need a Stormwater Permit? A Construction Site Operator's Guide to EPA's Stormwater Permit Program."
- ***Effectiveness of dissemination of compliance assistance materials to regulated entities:*** Based on interviews and available data, it is not clear the extent to which OECA's compliance assistance materials are actually reaching industry. OECA makes its compliance assistance materials available through the CICA website, and through conferences and meetings, however these means of communication may be most likely to reach those in industry who are already aware of the storm water program, rather than non-filers. Some Regions and many States have developed alternative approaches to delivering compliance assistance through on-site technical assistance. These may offer good models for dissemination, which OECA could support and promote. For example, there are valuable models at the State level for integrating storm water requirements into the process of obtaining local building permits.

Compliance Monitoring

- ***Degree to which industry is subject to on-site inspections:*** Overall, Regions and States have increased their focus on on-site compliance inspections for construction storm water since 2000, although little data on compliance monitoring is available for the early years of the time period covered by this evaluation.
- ***Methods for targeting inspections:*** States and Regions primarily rely on a sector approach or referrals from states and citizens to target inspections. There are opportunities to support

targeting based on risk-based criteria, for example, by helping Regions and States identify areas with impaired watersheds and rapid construction growth.

- ***Suggestions for improving compliance monitoring:*** Regions and States comment that providing inspector training and contractor resources for inspections could improve compliance monitoring.

Enforcement

- ***Degree to which industry is subject to enforcement actions:*** There has been an overall increase in attention on enforcement for construction storm water over the course of the evaluation period, at least at the Regional level. According to data reported by Regions, the number of construction storm water cases has increased since 2000, with the greatest percentage increase observed in 2003. In addition, the share of total storm water enforcement cases associated with construction has increased since 2000.
- ***Nature of non-compliance:*** Regions and States reported the most common violations to be inadequate SMPs and the failure to properly implement SWPPPs. Regions and States also noted the failure to adequately maintain BMPs as the most important cause of non-compliance. Although OECA has worked hard to clarify the meaning and implementation of the regulations, regulators, industry, and environmental NGOs all express interest in improving the certainty and clarity of storm water requirements for the construction industry.

Collaboration and Data Sharing

- ***Extent of communication across EPA Headquarters, Regions, and States:*** In general, there is regular communication between EPA Headquarters and Regions, and between Regions and States. Regions appreciate OECA's efforts to elicit their involvement in the storm water program, however some Regions report that more opportunities for input are needed. Authorized States generally perceive that they operate independently from the Regions, but the nature of the relationship between Regions and States varies widely.
- ***OECA's role in promoting compliance:*** Regions value OECA's leadership role in the national enforcement cases and in developing and disseminating certain enforcement tools. Regions particularly value the role of the Storm Water Team Leader, who has served as the go-to person who can get answers related to construction storm water. However, some Regions say they need more resources, training, and other types of support from OECA.
- ***Extent of data sharing:*** More consistent data tracking for construction storm water across Regions, and more centralized reporting for States, would help track progress on the construction storm water program.

Overall Summary of OECA's Progress in Storm Water Priority Area of Phase I Construction Activities

OECA has made a substantial investment in improving compliance with Phase I construction storm water regulations since 2000, such as committing staff time and contractor funds to develop the storm water strategies and enforcement tools, create compliance assistance materials, and coordinate national enforcement cases. Overall, our findings suggest that industry's awareness of the Phase I requirements has increased since 2000, and that in recent years Regions and States have put an increased emphasis on compliance monitoring and enforcement. These activities have generated increased demand for compliance assistance, which Regions and States are meeting largely through offering training and compliance assistance materials tailored to their particular jurisdiction.

It is difficult to assess the overall effectiveness of OECA's programs as measured by changes in water quality. A key reason for this is that in most cases OECA does not have a direct role in regulating storm water discharges, but rather relies on Regional, State, and local implementation of the program. Thus it is hard to trace changes at the ground level back to OECA's activities, since OECA's efforts are interpreted and shaped by Regions, States, and local agencies.

In the future it may be important for OECA to focus on how to define key measures of success targeted at those audiences (especially Regions) that it reaches directly, realizing that Regions are coming from diverse perspectives, and initiatives that are poorly received in one Region may be highly valued in another. At the same time, it is important to track overall progress on reaching storm water goals by analyzing the extent to which water quality is improving (or declining) for key pollutants generated by construction activities (e.g. sediment) by using existing data on impaired waters, such as that provided in the National Water Quality Inventory Report to Congress.

RECOMMENDATIONS

IEc and Kerr offer recommendations intended to improve OECA's efforts in ensuring storm water compliance in the construction industry through increased collaboration with all levels of government and an adaptation of compliance strategies to meet the needs of this regulated sector.

Overarching Recommendations

We present the following overarching recommendations that are applicable to several areas of the evaluation.

- ***Recommendation 1: Develop Information Systems that Provide Reliable Data Regarding Construction Storm Water Compliance:*** Much of the information collected in ICIS and PCS is collected at the level of the overall NPDES program and does not readily facilitate

analysis at the priority-specific level. For every priority area selected for attention, OECA should consider adjusting existing data systems to track priority-specific efforts and progress.

- ***Recommendation 2: Consider Developing Realistic Performance Measures with the Regions based on Available Resources and a Multi-Year Strategy:*** OECA may want to consider working directly with Regions to develop collaborative performance measures that incorporate regional input from the outset and link intended outcomes to program inputs as part of EPA's storm water compliance and enforcement strategy.

Level of Compliance

- ***Recommendation 3: Work with Local Regulators to Improve Data on the Number of Regulated Construction Sites:*** Local regulators keep records of the number of building permits issued, and in some jurisdictions, require evidence of a storm water permit from construction developers. OECA should consider working with local regulators to ascertain the universe of Phase I and Phase II sites.
- ***Recommendation 4: Provide States with an Adaptable Electronic NOI Database System:*** OECA may wish to consider working with OW to provide States with a platform for the electronic NOI database system that is adaptable to State needs and that may be used independently of EPA.

Key Strategies and Policies

- ***Recommendation 5: Consider a Multi-Year Approach to Storm Water Strategies that Contains Realistic Measures of Performance:*** Since considerable time is needed to fully implement the storm water strategies, EPA should anticipate how the strategies will be disseminated in stages, and allow time for the strategies to be implemented before a new strategy is issued with updated priorities.
- ***Recommendation 6: Revise ESO Policy and Develop a Communication Strategy:*** OECA should consider revising the ESO policy in accordance with the feedback received from the pilot experience and the findings of this evaluation, and develop a communication strategy for this innovative enforcement tool.
- ***Recommendation 7: Track Overall Progress through Use of National Water Quality Inventory Reports or other Monitoring Data about Watershed Impairments:*** Tracking water quality trends, particularly in areas of rapid development, could provide a way for OECA to benchmark whether the combined efforts of EPA, States, and local governments are having their intended effect.

Compliance Assistance

- ***Recommendation 8: Invest in In-Person Compliance Assistance Efforts with Contractors and Field Staff:*** OECA may want to consider investing in compliance assistance approaches

that have the potential to provide greater learning, such as classroom training that includes a field component or an education video for the construction industry.

- ***Recommendation 9: Develop Flexible Compliance Assistance Materials that are Easily Adaptable for State and Local Needs:*** OECA may wish to consider working with States to develop flexible compliance assistance materials that can be easily adapted to local use and regional conditions.
- ***Recommendation 10: Modify Delivery of Compliance Assistance Materials to Fit within Existing Local Permitting Networks Familiar to Construction Industry:*** OECA has an opportunity to build on local models that hand out storm water compliance assistance materials as part of local permitting activities by partnering with local officials.

Compliance Monitoring

- ***Recommendation 11: Provide Targeting Resources to Regions and States:***OECA may wish to work with the Office of Water to support Regional and State targeting efforts such as identifying fast-growing areas of the country and their proximity to impaired, or pristine, waters
- ***Recommendation 12: Consider Alternative Compliance Monitoring Approach that Provides Greater Compliance Assistance:*** OECA may wish to consider development of a customized, on-site compliance assistance effort for those portions of the construction industry that represent small businesses.

Enforcement

- ***Recommendation 13: Use Nature of Non-Compliance Events to Clarify Construction Storm Water Requirements:*** OECA may wish to consider the most commonly found non-compliance events as areas that require additional attention for compliance assistance efforts or clarification of the requirements.

Collaboration and Data Sharing

- ***Recommendation 14: Increase Participation by Regions and States in Setting Storm Water Priorities and Developing Multi-Year Strategies:*** OECA should consider increasing Regional and State participation in setting storm water priorities, developing multi-year strategies, and collaborating in promoting compliance with the Phase I storm water requirements for the construction industry.

Storm water runoff is water that washes off the land after a rainstorm and into nearby bodies of water. This runoff carries surface sediments, nutrients, metals, and other pollutants into streams, rivers, and other waterways. Runoff from construction sites is a significant source of storm water leading to water quality impairment. According to the *Report to Congress on the Phase I Storm Water Regulations*, nine percent of impaired rivers and streams are impacted by storm water from construction sites, as are 11 percent of lakes and estuaries, 17 percent of ocean shorelines, and one percent of Great Lakes shorelines.¹

In order to address the impacts of storm water runoff from construction sites, EPA's Office of Enforcement and Compliance Assurance (OECA) has overseen a multi-year effort to improve compliance with storm water regulations and reduce storm water runoff. Beginning in 1992, owners and operators of large construction sites (those disturbing five or more acres) have been required to obtain a permit for discharging storm water, prepare a site-specific storm water pollution prevention plan (SWPPP), and install and maintain site-specific best management practices (BMPs) that prevent discharge of sediment and other pollutants off site. On January 18, 2000, OECA issued a compliance and enforcement strategy that prioritized storm water enforcement efforts targeted to industrial facilities, including large construction sites. Based on that strategy and subsequent policies, OECA has developed a multi-faceted program to educate construction site owners and operators about these requirements, monitor compliance, and take enforcement actions against construction entities that do not comply.

As part of its Smart Enforcement strategy issued in 2003, OECA committed to conduct third party evaluations of selected program areas in order to strengthen program credibility and support program effectiveness. Having had several years of experience in implementing its storm water program for large construction sites, OECA elected this program to be evaluated by an independent third party. During the past several months, Industrial Economics Incorporated (IEc) and its subcontractor Kerr, Greiner & Associates, Inc. (Kerr) have conducted this evaluation with assistance and input from OECA headquarters staff, the Evaluation Support Division of the National Center for Environmental Innovation, and the storm water work group (comprised of staff from OECA's Offices of Planning, Policy Analysis, and Communication (OPPAC), Regulatory Enforcement (ORE), Compliance (OC), the Office of Water (OW), and Regional representatives). To conduct the evaluation, IEc and Kerr arranged interviews and

¹ U.S. Environmental Protection Agency, Office of Water. *Report to Congress On The Phase I Storm Water Regulations*. EPA833-R-00-001, February 2000, page 1-5.

collected information from staff at EPA HQ, including OECA and the Office of Water (OW), representatives of all ten EPA Regions, representatives of eight State agencies, two industry trade associations and three individual contractors, and four environmental non-governmental organizations (NGOs). The scope of the evaluation is OECA's storm water enforcement and compliance program for Phase I construction sites (those disturbing five or more acres) since 2000.² Based on the information gathered from interviewees and published reports, this evaluation seeks to answer six key questions about OECA's storm water program for large construction sites:

1. What is the level of compliance with storm water regulations in the construction industry?
2. What effect are OECA's key policies having on the ability of EPA Regions and States to implement the Phase I storm water compliance and enforcement program; and on the behavior of the construction industry?
3. Are EPA's compliance assistance materials being used? If so, how are they being used and are they effective?
4. What is the level of compliance monitoring done by EPA?
5. How is enforcement being conducted in this sector and is it effective?
6. What is OECA's role in fostering effective sharing of information and resources to leverage Regional and State resources?

Based on the findings for these questions, this evaluation is intended to: 1) determine whether OECA's storm water compliance and enforcement program for large construction activities is accomplishing its mission; 2) identify areas where the program has been effective and where it may have been less than effective; and 3) recommend changes that may be implemented to improve program performance.

The results of this evaluation may be of interest to several different audiences. First, OECA management and members of the storm water workgroup may use the results of the evaluation to assess program effectiveness and identify potential improvements. Second, Regions and States may find the study helpful in communicating with OECA about enhancing program implementation. Finally, members of the regulated community, environmental NGOs, and the interested public may find the report helpful in understanding OECA's goals for the program and initiating dialogues about program outcomes.

² OECA selected this beginning date for the evaluation based on the issuance of the 2000 compliance and enforcement strategy for storm water. As noted above, 2000 is also the year of EPA's Report to Congress on the Phase I Storm Water Regulations in which then Administrator Carol M. Browner acknowledges in her cover letter that the Agency does "not currently have a system in place to measure the success of the Phase I program on a national scale."

BACKGROUND ON CONSTRUCTION STORM WATER REQUIREMENTS

OECA's storm water program for large construction sites is regulated under the National Pollutant Discharge Elimination System (NPDES) permit program, which is designed to control the pollutants discharged from point sources. Within the NPDES program, the Phase I storm water requirements target storm water discharges from large municipal separate storm sewer systems (MS4s) and industrial activities. Industrial activities regulated under the Phase I program include "storm water discharges from construction activities (including grading, clearing, excavation, or other earthmoving activities) that result in the disturbance of 5 or more acres of total land area, including areas that are part of a larger common plan of development or sale."³

On November 16, 1990, EPA promulgated regulations requiring that Phase I construction sites (along with certain MS4s) have NPDES permits (55 FR 47990).⁴ EPA is the permitting authority for storm water construction sites in only five States (Alaska, Idaho, Massachusetts, New Hampshire, and New Mexico), along with the District of Columbia, Puerto Rico, and various other territories (e.g., American Samoa and Guam) since most states have been authorized to implement the NPDES storm water program. In addition, EPA is the permitting authority for Indian Country and Federal facilities in a number of additional States.⁵ EPA and authorized States have relied on general permits as the primary mechanism for providing permit coverage for storm water discharges associated with industrial activities. On September 9, 1992, EPA issued a baseline general permit that specifically addressed storm water discharges associated with construction activity (57 FR 44412).⁶ This baseline general permit had a term of five years, and was intended to cover most of the storm water discharges associated with construction activity in all States not authorized to issue NPDES permits. EPA and authorized States began requiring construction owners/operators to obtain a permit for storm water discharges on October 1, 1992. Based on information collected from this initial baseline general permit, as well as experience gained from implementing the general permit, EPA revised and reissued the general permit on February 14, 1998 (63 FR 7898), again with a five year term.⁷ Later that year, EPA Regions 4 and 6 reissued separate construction general permits that apply only in areas where the EPA region is the NPDES permitting authority (63 FR 15622, March 31, 1998, and 63 FR 36490, July 6, 1998, respectively). When the 1998 permit expired, a new NPDES general permit for storm water discharges from construction activities was issued by all EPA Regions except Region 4 on July 1, 2003 (68 FR 39087, July 1, 2003). A summary of the chronology for the NPDES Phase I construction stormwater permit is shown in Exhibit 1-1.

³ 2000 *Report to Congress*, page 1-10.

⁴ *Ibid*, page ES-3.

⁵ For details on authorization status for EPA's storm water construction program, see <http://cfpub.epa.gov/npdes/stormwater/authorizationstatus.cfm>.

⁶ 2000 *Report to Congress*, page 1-10.

⁷ *Ibid*, pages 1-10, 1-11.

Exhibit 1-1	
CHRONOLOGY OF FEDERAL NPDES PHASE I CONSTRUCTION STORM WATER PERMIT	
Date (citation)	Event
November 16, 1990 (55 FR 47990)	EPA promulgates regulation establishing permit application requirements for storm water discharges associated with “industrial activities,” including construction activities that disturb five or more acres of land (i.e., Phase I construction sites).
December 18, 1991	Congress enacted the Intermodal Surface Transportation Efficiency Act (ISTEA), which postponed NPDES permit application deadlines for most storm water discharges associated with industrial activity at facilities that are owned or operated by small municipalities, including construction activity over five acres.
September 9, 1992 (57 FR 44418)	EPA issues the first construction general permit for non-authorized states, with a permit term of five years pursuant to the Clean Water Act.
October 1, 1992	Effective date for construction operators to obtain Phase I permit coverage.
February 14, 1998 (63 FR 7898)	EPA issues an updated construction general permit for non-authorized states.
July 1, 2003 (68 FR 39087)	EPA issues an updated construction general permit for non-authorized states which includes small construction sites less than five acres (i.e., Phase II construction sites)

For facilities permitted by EPA, the baseline general permit for construction activities requires development and implementation of a site-specific SWPPP specifying erosion and sediment control measures that will be implemented at the site. Examples of these BMPs include controls designed to retain sediment on site; controls that prevent litter, construction debris, and construction chemicals from becoming a pollutant; and interim and permanent stabilization practices to preserve existing vegetation.⁸ Authorized States may issue Phase I construction general permits with special conditions to protect impaired water bodies and/or address regional considerations that are more stringent than the federal requirements. A summary of special general permit conditions in the eight States interviewed for this evaluation, along with the date of the general permit and comments on permit authority for Indian Country and Federal Facilities is summarized in Exhibit 1-2.

Exhibit 1-2			
SUMMARY OF PERMIT CONDITIONS FOR AUTHORIZED STATES ADDRESSED IN THIS EVALUATION			
State & Authorizing Entity	General Permit (date)	Special General Permit Conditions	Permitting Authority for Indian Country, Federal Facilities, and Exceptions to General Permit Coverage
Alabama Department of Environmental Management (ADEM)	First issued in 1994 – see: 40 CFR 122.26, Reissued on January 23, 2003	Construction activities less than 1 acre in size that are determined by ADEM to have significant potential to cause or contribute to water quality impairment, may be required to register.	<ul style="list-style-type: none"> • EPA permits Indian Country • State permits Federal Facilities • Registration does not authorize disturbance activity for sites/projects in the Coastal Zone of Baldwin and Mobile counties until coastal consistency certification or permit coverage is obtained, if required by ADEM Admin. Code Division 335-8.

⁸ Ibid, page ES-4.

Exhibit 1-2

SUMMARY OF PERMIT CONDITIONS FOR AUTHORIZED STATES ADDRESSED IN THIS EVALUATION

State & Authorizing Entity	General Permit (date)	Special General Permit Conditions	Permitting Authority for Indian Country, Federal Facilities, and Exceptions to General Permit Coverage
California State Water Resources Control Board (SWRCB)	Reissued on August 19, 1999 – see: 99-08-DWQ	SWPP must contain visual monitoring program, chemical monitoring program for “non-visible” pollutants to be implemented if failure of BMPs; and sediment monitoring plan for discharges to waterbody on 303(d) list for sediment	<ul style="list-style-type: none"> EPA permits Indian Country and Federal Facilities SWRCD adopted NPDES permit for California Department of Transportation; Lahontan Regional Water Control Board adopted separate NPDES permit for Lake Tahoe Hydrologic Unit Facilities
Colorado Department of Public Health and Environment (CDPH&E)	Stormwater program began on October 1, 1992 - see Http://www.cdphe.state.co.us/wq/PermitsUnit/SW-Municipal-Ind-QA.pdf	<p>The Division may use other criteria in evaluating whether an individual permit is required instead of this general permit</p> <p>a) the quality of the receiving waters (i.e., the presence of downstream drinking water intakes or a high quality fishery, or for preservation of high quality water);</p> <p>b) the size of the construction site;</p> <p>c) evidence of noncompliance under a previous permit for the operation;</p> <p>d) the use of chemicals within the stormwater system.</p> <p>In addition, an individual permit may be required when the Division has shown or has reason to suspect that the stormwater discharge may contribute to a violation of a water quality standard.</p>	<ul style="list-style-type: none"> EPA permits Indian Country and Federal Facilities
Georgia Department of Natural Resources, Environmental Protection Div. (GDNR)	Reissued August 13, 2003		<ul style="list-style-type: none"> State permits Indian Country and Federal Facilities
Kansas Department of Health & Environment (KDHE)	Last general permit expired on Dec, 31, 2001	Unless KDHE grants special permission, GP does not authorize discharging stormwater runoff ½ stream mile or less from a Critical Water Quality Management Area; an Exceptional State Water; an Outstanding National Resource Water; or a Special Aquatic Life Use Water	<ul style="list-style-type: none"> EPA permits Indian Country State permits Federal Facilities

Exhibit 1-2

SUMMARY OF PERMIT CONDITIONS FOR AUTHORIZED STATES ADDRESSED IN THIS EVALUATION

State & Authorizing Entity	General Permit (date)	Special General Permit Conditions	Permitting Authority for Indian Country, Federal Facilities, and Exceptions to General Permit Coverage
Maryland Department of the Environment (MDE)	March 1, 2003 – reissued general permit 97-GP-0004 upon its expiration	Several areas in Maryland have been designated as special protection areas. Additional permitting requirements and restrictions exceeding general state performance standards may apply to construction projects in these locations. These areas include: Montgomery County, Patuxent River, and the Chesapeake Bay Critical Area	<ul style="list-style-type: none"> • State permits Indian Country and Federal Facilities • Maryland Department of the Environment has delegated program enforcement to 13 counties, including all major urban counties
Nevada Division of Environmental Protection (NDEP)	September 16, 2002 – reissued stormwater general permit GNV0022241 upon its expiration		<ul style="list-style-type: none"> • EPA permits Indian Country • State permits Federal Facilities
Washington Department of Ecology (WDE)	Baseline stormwater general permit issued on November 12, 1992; construction general permit issued on November 18, 1995) http://www.ecy.wa.gov/programs/wq/stormwater/construction/cnst_fact_fin.pdf	On August 29, 2001, the Pollution Control Hearings Board issued a partial stay of the construction stormwater general permit. This partial stay applied to waters listed under Section 303(d) of the Clean Water Act and waters subject to Total Maximum Daily Load determinations.	<ul style="list-style-type: none"> • EPA permits Indian Country and Federal Facilities

OVERVIEW OF OECA’S PHASE I CONSTRUCTION STORM WATER PROGRAM

OECA’s construction storm water compliance and enforcement program seeks to coordinate efforts across Federal, State, and local jurisdictions in order to promote compliance with the Phase I requirements and prevent polluted runoff from reaching waterways. Since most States are authorized to implement the NPDES storm water program, and since MS4s are required to control pollutants from targeted sources, implementation of storm water requirements often takes place at the State or local level. At the Federal level, OECA works with the Office of Water (OW) and EPA Regions to promote compliance with Phase I requirements. OW is

primarily responsible for developing the regulations and providing technical support and compliance assistance to interpret the regulations. OECA seeks to ensure compliance with those requirements through an integrated approach to compliance assistance, compliance incentives and innovative enforcement approaches. Enforcement and program staff within EPA Regions are responsible for maintaining oversight of authorized States, and implementing the Phase I program in unauthorized States.

Key aspects of OECA's construction storm water program include: developing national compliance and enforcement strategies and policies; coordinating national enforcement cases; developing compliance assistance materials for distribution to industry; and providing training, technical support, access to contractors, and other resources to EPA Regions and States. Exhibit 1-3 provides a logic model that illustrates the different components of OECA's Phase I construction storm water program. The logic model shows a graphical representation of the relationships between program inputs, outputs, and intended outcomes for the key stakeholders involved in the Phase I construction storm water program. These key stakeholders include OECA itself, the EPA Regions, States, local officials, industry trade associations, and environmental NGOs. Key components of the logic model include:

- **Resources** are the programmatic investments available to support the construction storm water program. The primary resources identified are funding (EPA and contractor) as well as staff time and expertise.
- **Activities** are the specific actions taken to achieve program goals. Under the construction storm water program, these activities include program management and policy, outreach and compliance assistance, and compliance monitoring and enforcement
- **Outputs** are the immediate product or service delivery/implementation targets that the program aims to produce. Conducting a number of compliance actions or a number of training sessions are two examples of outputs of the construction storm water program.
- **Customers/Target Audience** are the users of the products/services that the program is designed to reach. The target audience for the construction storm water program is principally the construction industry and trade associations, regulated through the chain of local officials, State environmental agencies, EPA Regions, and EPA HQ.
- **Short-term Outcomes** are the changes in learning, knowledge, attitude, and skills that result from activities and outputs. The awareness of regulations and the understanding of how to comply are two short-term outcomes of the construction storm water program.
- **Long-Term Behavioral Outcomes** are the changes in behavior, practice or decisions that result from activities and outputs. Long-term behavioral outcomes are broader in scope and often build upon the progress of short-term behavioral outcomes. For example, increased efforts to come into compliance with construction storm water requirements are expected to lead to the improved development and maintenance of BMPs.
- **Long-Term Environmental Outcomes** are the changes in condition that result from activities and outputs. These outcomes address the overarching goals of the construction

storm water program. Key long-term environmental outcomes of the construction storm water program include reduced sediment loadings in watersheds and habitat improvement.

- **Contextual/External Variables** are factors not directly controlled by the construction storm water program that may affect how the program performs. These variables include factors such as the relationship between EPA and State agencies, the culture of enforcement or compliance assistance in Regions and States, and the uneven pace of construction activity in different parts of the country.

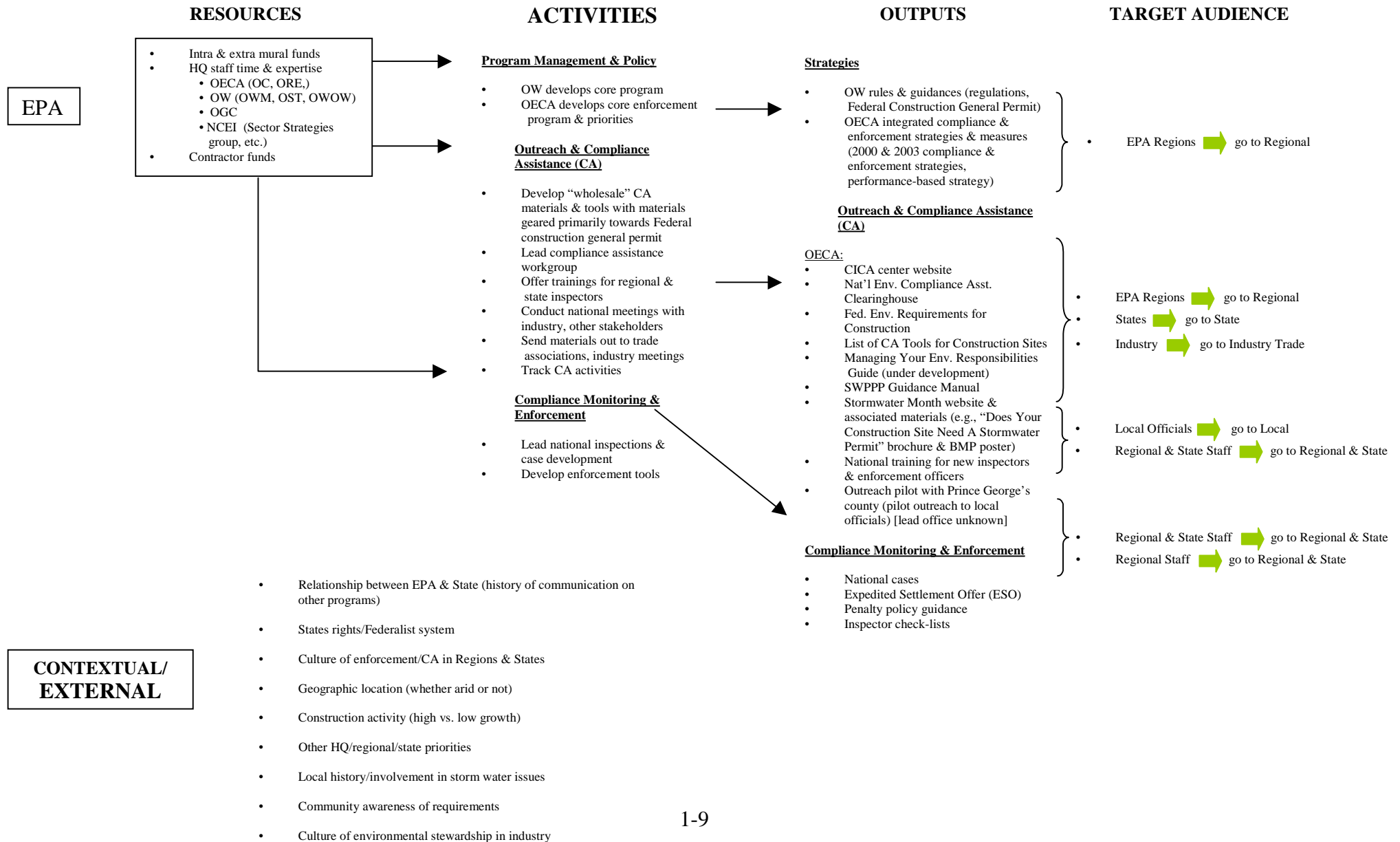
This logic model is presented in a “cascading” format, meaning that the logic model shows how actions taken by one stakeholder (e.g., OECA) cascade down to affect other stakeholders (e.g., EPA Regions and States), and how these cascading actions ultimately affect the construction owners and operators. This cascading logic model expands upon an earlier, streamlined version of the logic model developed by EPA. Both the streamlined logic model that EPA provided and this expanded format help frame the evaluation and the performance measures included in Exhibit 2-7 to assess the effectiveness of OECA’s Phase I construction storm water program.

STRUCTURE OF THE REPORT

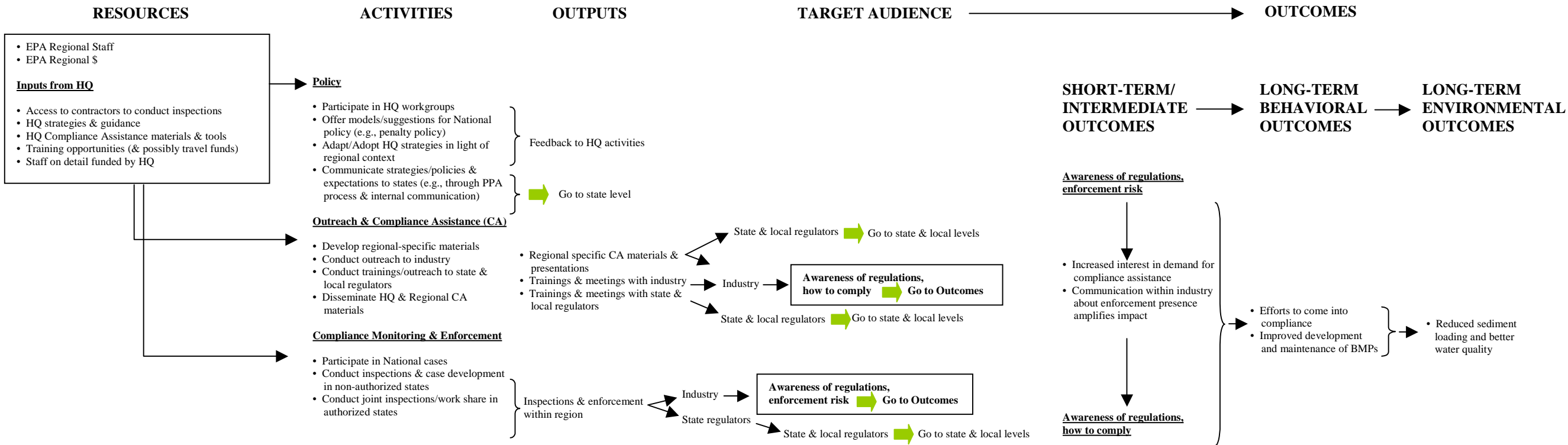
The remainder of this report is organized as follows:

- Chapter 2 presents the evaluation methodology, including data sources, data collection and use of information, data limitations, selection of interviewees, information collection processes, and the data analysis plan.
- Chapter 3 presents the evaluation findings organized by the six key evaluation questions described above. Findings address levels of compliance, key strategies and policies, compliance assistance, compliance monitoring, enforcement, collaboration, and assessment of OECA’s program against the logic model and performance measures.
- Chapter 4 presents our recommendations to OECA regarding changes that may be implemented to improve program performance.

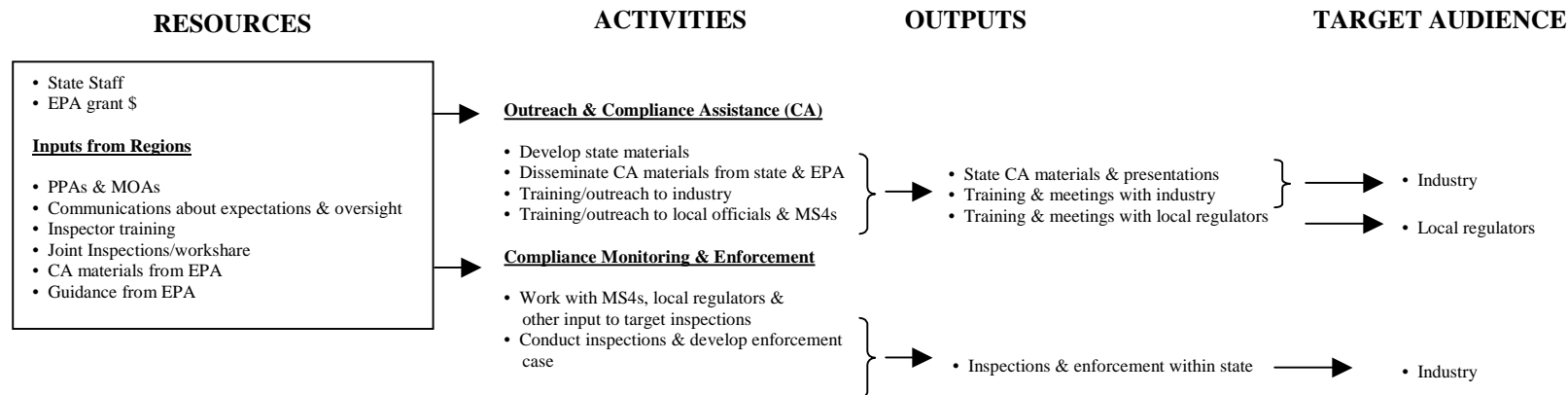
Exhibit 1-3: Construction Storm Water Logic Model



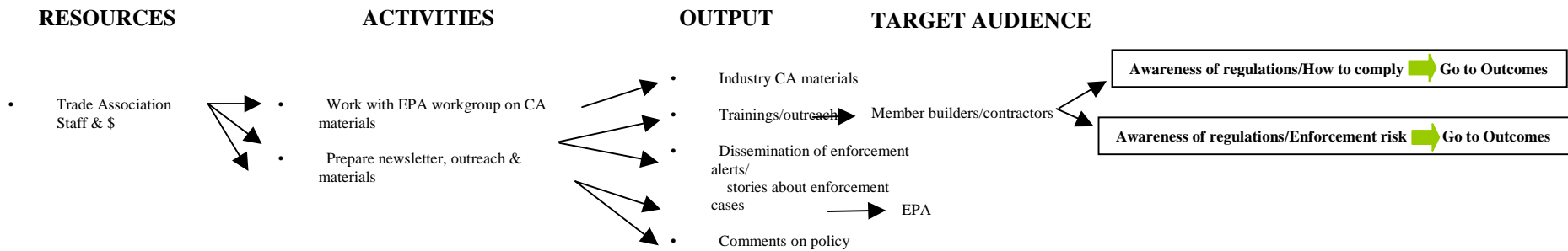
EPA REGIONS



STATE



INDUSTRY TRADE ASSOCIATIONS



This chapter describes the approach used to evaluate OECA's Phase I Storm Water Construction Compliance and Enforcement Program. The objective of this evaluation is to assess the performance of OECA's program with respect to storm water construction activities, to identify effective approaches and areas for improvement, and to recommend implementable changes to improve program performance. OECA seeks to maximize compliance and reduce threats to public health and the environment by employing an integrated approach to compliance assistance, compliance incentives and innovative enforcement approaches.

To accomplish this objective, OECA collaborates with a large number of partners. These partners include the Office of Water (OW) that developed the Phase I storm water construction requirements and provides compliance assistance to the regulated community and EPA Regions and authorized States that have front-line responsibility for implementing the rules. In addition, OECA coordinates with Tribal governments and other Federal agencies responsible for complying with storm water requirements on Federal facility sites. OECA also gathers input from national construction trade associations (e.g., on developing a compliance assistance website) and environmental NGOs. In addition, OECA integrates the efforts of its internal Offices of Planning, Policy Analysis and Communications (OPPAC); Regulatory Enforcement (ORE); and Compliance (OC) to develop and execute smart enforcement initiatives.

The primary source for data collection was interviews conducted by IEc and Kerr in-person or by telephone with OECA and OW Headquarters staff; construction storm water staff in all 10 EPA Regions; eight State representatives (Alabama, California, Colorado, Georgia, Kansas, Maryland, Nevada, and Washington); national and local construction trade associations; construction contractors and storm water professionals; and representatives of environmental NGOs (lists of those interviewed are included as Exhibits 2-2, 2-3, 2-5, and 2-6). IEc and Kerr developed, with input from OECA's Storm Water Team, customized interview guides for each set of respondents:

- For EPA Regional and State representatives, IEc and Kerr solicited responses designed to determine the level of compliance with storm water regulations in the construction industry, whether EPA's compliance assistance materials are being used, the level of compliance monitoring, how enforcement is conducted and its effectiveness, and the impact of key OECA policies and enforcement tools (see Attachments A and B, respectively, for interview guides).

- For construction industry trade association representatives and individual contractors, we solicited information regarding the challenges faced by the sector in complying with the storm water construction requirements, their interactions with Federal, State, and local regulators, the types of compliance assistance materials that have been most useful for construction operators, and their experience with compliance monitoring and enforcement (see Attachments C and D, respectively, for interview guides).
- For environmental NGOs, IEC and Kerr asked questions regarding their experience with storm water compliance levels among the construction sector and OECA's efforts to maximize compliance and reduce threats to the environment (see Appendix E for the interview guide). The following sections discuss the selection of the interviewees and summarize the process used for conducting the interviews, evaluating data, as well as the limitations of this analysis.

In addition to conducting extensive interviews, IEC and Kerr examined a variety of policy documents and data sources in an effort to assess overall program performance. These include general reports that focus on enforcement and compliance assurance results; construction storm water reports in particular; compliance assistance materials prepared by OECA and OW; data sources and tracking tools used to report on compliance monitoring and enforcement activities; and strategies and policies that provide enforcement and performance measurement guidance (Exhibit 2-1).

Exhibit 2-1	
PHASE I STORM WATER CONSTRUCTION DATA SOURCES	
<i>General Enforcement and Compliance Assurance Reports:</i>	<ul style="list-style-type: none"> • EPA FY2004 End of Year Enforcement and Compliance Assurance Results, November 15, 2004 (http://www.epa.gov/compliance/resources/reports/endofyear/eoy2004/fy04results.pdf) • EPA Inspector General, Congressional Request Regarding EPA Clean Water Enforcement Actions, Report No. 2005-S-00001, October 18, 2004 (http://www.epa.gov/oig/reports/2005/20041018-2005-S-00001.pdf)
<i>General Storm Water Reports:</i>	<ul style="list-style-type: none"> • Environmental Integrity Project, Weathering the Storm: Controlling Storm Water Pollution in the Great Lakes States, September 2004 (http://www.environmentalintegrity.org/pubs/Weathering_the_Storm.pdf) • EPA, Office of Water, Report to Congress on the Phase I Storm Water Regulations, February 2000. (http://cfpub.epa.gov/npdes/docs.cfm?document_type_id=6&view=Program%20Status%20Reports&program_id=6&sort=name) • EPA, Office of Water, Report to Congress on the Phase II Storm Water Regulations, October 1999. (http://www.epa.gov/npdes/pubs/ReptoCong_PhII_SWR.pdf) • EPA, Office of Wastewater Management, Economic Analysis of the Final Phase II Storm Water Rule, Final Report, October 1999 (http://www.epa.gov/npdes/docs.cfm?program_id=6&view=allprog&sort=name)
<i>Compliance Assistance Materials:</i>	
<i>Prepared by OECA:</i>	<ul style="list-style-type: none"> • Construction Industry Compliance Assistance Center (www.cicacenter.org) • The CA Compass: New Directions in Compliance Assistance, Volume 1, Number 1, Spring 2004 (http://www.epa.gov/compliance/resources/newsletters/assistance/cacompassvol1no1.pdf) • National Environmental Compliance Assistance Clearinghouse (http://cfp.epa.gov/clearinghouse/)

Exhibit 2-1	
PHASE I STORM WATER CONSTRUCTION DATA SOURCES	
<ul style="list-style-type: none"> • Federal Environmental Requirements for Construction • List of Compliance Assistance Tools for Construction Sites • OECA Enforcement Alert 	
<i>Prepared by OW:</i>	
<ul style="list-style-type: none"> • Storm Water Pollution Prevention Plans Guidance Manual (1992) • OW storm water month website (http://cfpub1.epa.gov/npdes/stormwatermonth.cfm) • Does Your Construction Site Need a Storm Water Permit? A Construction Site After the Storm Brochure • After the Storm Brochure • Storm water and the Construction Industry Poster • Door Hanger: "Storm Water Pollution Found in Your Area!" 	
Compliance Monitoring:	
<ul style="list-style-type: none"> • Inspection Conclusion Data Sheet (ICDS) • Integrated Compliance Information System (ICIS) • EPA Regional respondents may have consulted the Reporting Compliance Assistance Tracking System (RCATS) 	
Enforcement:	
<ul style="list-style-type: none"> • Case Conclusion Data Sheet and updated Training Booklet, August 2004 • Integrated Compliance Information System (ICIS) • Data Reporting Template (used for mid-year and end-of-year reporting by the Regions) 	
Strategies and Policies:	
<ul style="list-style-type: none"> • Supplemental Guidance to the Interim Clean Water Act Settlement Penalty Policy (March 1, 1995) for Violations of the Construction Storm Water Requirements, September 15, 2004 CONFIDENTIAL • Performance-Based Strategy for Storm Water National Compliance and Enforcement Priority, July 1, 2004 (includes Gap Analysis for the FY 05-07 Storm Water Strategy: Estimated Regional Distribution of Activities) CONFIDENTIAL • Enforcement Response Guide for Storm Water (Construction): <i>Interim Final</i> • 2003 Storm Water Compliance and Enforcement Strategy signed by Michael Stahl and Walker Smith (http://www.epa.gov/compliance/resources/policies/civil/cwa/stwenfstrategy2003.pdf) • 2003 Expedited Settlement Offer (ESO) Program for Storm water (Construction) signed by John Peter Suarez • EPA Region I, 2003 Storm Water Compliance and Enforcement Strategy: "Smart Enforcement" for Storm Water • EPA Region 5, Storm Water Permitting and Compliance Strategy, December 1, 2004 • Using Performance Measurement Data as a Management Tool, June 10, 2002 (known as the "blue book") (http://www.epa.gov/compliance/resources/reports/planning/results/perfmeastool.pdf) • 2000 Storm Water Compliance and Enforcement Strategy signed by Eric Schaeffer (http://www.epa.gov/Compliance/resources/policies/civil/cwa/stmwtrstra.pdf) 	

DATA COLLECTION AND USE OF INFORMATION

The evaluation is based on a series of in-person or telephone interviews with storm water representatives from the 10 EPA Regions, eight States, two industry trade associations and three individual contractors, and four environmental NGOs. In addition, IEc and Kerr conducted conference calls with OECA personnel from the Offices of Planning, Policy Analysis and Communications, Regulatory Enforcement, and Compliance regarding storm water activities and Office of Water (OW) personnel responsible for developing storm water regulations and implementation tools. As a result of these conversations, we collected and analyzed policy

documents and data sources provided by OECA and OW that pertained directly to the design and implementation of the Phase I storm water construction compliance and enforcement program.

The evaluation results will be used by OECA to better understand the results of its Phase I storm water construction program and to make future modifications to increase overall program effectiveness. EPA Regions and States may also find the report useful in making adjustments in the kind and delivery of compliance assistance materials to the construction industry. Finally, the construction industry may find the report useful in securing additional support to achieve storm water objectives.

DATA LIMITATIONS

To help OECA consider the evaluation's findings, IEC and Kerr worked with the storm water workgroup to interpret the study results. In doing so, we kept several data limitations in mind:

- The interviewees represent a subset of personnel from Regions, States, the construction industry, and environmental groups. For the Federal and State regulatory agencies, we requested that compliance and enforcement storm water staff be interviewed together, along with staff responsible for compliance assistance, to get a more complete picture of the storm water program. In several cases, this was not possible for a variety of reasons (i.e., scheduling constraints, storm water functions organized across several offices). As a result, we conducted follow-up interviews to the extent feasible. Even so, the information and perspectives that we gather may not represent the experience of all relevant staff.
- Beginning the evaluation with 2000 activities means that any compliance efforts conducted between rule promulgation in 1990 and 2000 are not included in this evaluation. During this period of time, the EPA Administrator moved compliance functions from program offices into the newly created Office of Enforcement and Compliance Assurance in 1994.⁹ A re-organization of this scale would have required considerable transition time and compliance functions would have been split between the Office of Water and OECA.
- Because of our nation's federalist system, OECA's activities are shaped by EPA's statutory mandate to enforce the Clean Water Act and by its potential to influence State and local efforts through support, adaptable compliance tools, and customized compliance assistance materials. Measuring the impact of OECA's influence at the State and local levels is difficult and often indirect, through Regional efforts.

⁹ See <http://www.epa.gov/history/org/oeca/02.htm> for a copy of Carol Browner's October 13, 1993 press release announcing the creation of the Office of Enforcement and Compliance Assurance and a re-organization of compliance functions from program offices to a centralized office with an Assistant Administrator reporting directly to the Administrator.

- In some cases, some responsibility for implementing the storm water program is delegated to field offices that are not fully represented in our interviews. One example is the State of California, which implements its storm water program through regional offices within the State. We spoke to a representative from only one of those regional offices, and his comments reflect experiences in that region alone. Thus references to “California” throughout this report refer only to the Sacramento/Central Valley Regional Water Board.
- The findings of the evaluation are only as accurate as the information provided by respondents and reported to EPA’s databases. In some cases, interviewees may have misinterpreted questions or inadvertently reported inaccurate quantitative or qualitative information. In addition, some respondents may not have been fully aware of all the efforts attributable to the Phase I construction storm water program. In addition, some respondents may not have been able to distinguish Phase I from Phase II construction sites, since the two programs are often managed together. In all cases, interviewers made an attempt to clarify answers, to verify information when possible, and to differentiate OECA’s contributions from other storm water actors.

SELECTION OF INTERVIEWEES

We conducted interviews with representatives from all ten EPA Regions to provide a representation of construction storm water compliance and enforcement issues from across the country. Exhibit 2-2 lists each Region and identifies the NPDES authorization status of the States in that Region. Most States are authorized to administer the NPDES permit program, with EPA administering the program in only five States (Alaska, Idaho, Massachusetts, New Mexico, New Hampshire), the District of Columbia, the Commonwealth of Puerto Rico, various territories (e.g., American Samoa and Guam), and for Indian Country and Federal Facilities in a number of additional States.

Exhibit 2-2		
EPA REGIONS AND NPDES AUTHORIZATION STATUS OF STATES		
<i>EPA Region</i>	<i>Authorized (Unauthorized States)</i>	<i>On-Site or Phone Interview</i>
1	Connecticut, Maine, Rhode Island, Vermont (Massachusetts, New Hampshire)	Site (Boston, MA)
2	New Jersey, New York (Puerto Rico)	Phone
3	Delaware, Maryland, Pennsylvania, Virginia, West Virginia	Phone
4	Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee	Site (Atlanta, GA)
5	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	Phone
6	Arkansas, Louisiana,	Phone

Exhibit 2-2		
EPA REGIONS AND NPDES AUTHORIZATION STATUS OF STATES		
<i>EPA Region</i>	<i>Authorized (Unauthorized States)</i>	<i>On-Site or Phone Interview</i>
	New Mexico, Oklahoma, Texas	
7	Iowa, Kansas, Missouri, Nebraska	Site (Kansas City, KS)
8	Colorado, Idaho, Minnesota, North Dakota, South Dakota, Utah, Wyoming	Site (Denver, CO)
9	Arizona, California, Hawaii, Nevada	Phone
10	Alaska, Idaho, Oregon, Washington	Phone

We also interviewed representatives from eight States who administer the State's authorized NPDES construction storm water program (Exhibit 2-3). The Storm Water Team selected seven of the States and Region 9 recommended that we also interview the State of Nevada. The States reflect variation across geographic location, soil conditions, maturity of storm water programs, specificity of permit conditions (e.g., California's general permit requires implementation of specific sampling and analytical procedures to determine effectiveness of Best Management Practices (BMPs), etc.). These States represent a distribution of geographic locations and Regions located across the country (Exhibit 2-4). In addition, we present the number of building permits issued by States in 2003 for new privately owned housing units and the percent of total housing units represented by these figures. These data are presented to provide an indicator of the level of construction activity for housing units by State, and do not correlate directly with site acreage and Phase I construction activities. These data also do not include construction activity associated with commercial or publicly-owned sites.

Exhibit 2-3				
STATES INTERVIEWED				
EPA Region	Authorized State	2003 Building Permits for New Privately Owned Housing Units¹	Percent of U.S. Total Housing Units in 2003²	On-Site or Phone Interview
3	Maryland	29,914	1.5%	Site
4	Alabama	22,256	1%	Site
	Georgia	96,704	5%	Site
7	Kansas	15,049	0.8%	Site
8	Colorado	39,569	2%	Site
9	California	191,948	10%	Phone
	Nevada	43,366	2%	Phone
10	Washington	42,825	2%	Phone

¹ The U.S. Census Bureau records the number of building permits issued by State for new privately owned housing units. Housing units can consist of one, two, three to four, or five units or more. While these data do not indicate whether these are Phase I construction sites, it provides an indicator of the level of construction activity for housing units in the pertinent State in 2003.

² This column presents the percent for each State of the total housing units in 2003.

Legend

Authorization Status	Interview Type
States with NPDES Authorization for Base Program (at a minimum)	Region : Interviewed in Person
States without NPDES Authorization	Region : Interviewed by Telephone
States included in Evaluation	State : Interviewed in Person
	State : Interviewed by Telephone

Map Data Summary:

Region	Interview Type	States	Authorization Status
1	Interviewed by Telephone	CT, MA, NH, RI, VT	Without NPDES
2	Interviewed by Telephone	DE, DC, MD, PA, VA, WV	With NPDES
3	Interviewed by Telephone	IL, IN, MI, OH	With NPDES
4	Interviewed in Person	AL, GA, FL	With NPDES
5	Interviewed by Telephone	MO, NE, KS, OK, AR, LA, TN, KY, WV	With NPDES
6	Interviewed by Telephone	TX, NM, AZ, CA	With NPDES
7	Interviewed in Person	CO, KS, OK, AR, LA, TN, KY, WV	With NPDES
8	Interviewed in Person	WY, MT, ND, SD, NE, KS, OK, AR, LA, TN, KY, WV	With NPDES
9	Interviewed by Telephone	CA, NV, AZ	With NPDES
10	Interviewed by Telephone	WA, OR, ID, MT, ND, SD, NE, KS, OK, AR, LA, TN, KY, WV	With NPDES

To collect information from the construction industry, we solicited input from two national trade associations (Exhibit 2-5). The national trade associations include the Associated General Contractors of America which represents 35,000 firms and the National Homebuilders Association with 215,000 member firms (more than 80 percent of which are small businesses). We also interviewed three construction contractors recommended by EPA Regions or a national trade association. IEC selected two contractors located in a NPDES authorized State and one contractor located in an unauthorized State, based on the limited timeframe and availability of contractors.

Exhibit 2-5	
CONSTRUCTION INDUSTRY REPRESENTATIVES INTERVIEWED	
<i>Construction Industry Representatives (Trade Associations, Contractors)</i>	<i>On-Site or Phone Interview</i>
Associated General Contractors	Phone
National Association of Home Builders	Phone
New Mexico Contractor	Phone
Texas Contractor	Phone
Texas Contractor	Phone

The NGOs interviewed for this evaluation represent environmental advocacy groups (Conservation Law Foundation (CLF) and Environmental Integrity Project (EIP)), and a center that promotes sustainable development (Low Impact Development Center (LID)) (Exhibit 2-6). The CLF and EIP interviews provide a regional focus (i.e., northeast for CLF and Great Lakes for EIP's report) that offers insights for national application. The LID interview provides a viewpoint for development that minimizes storm water impacts. Unfortunately, time did not permit interviewing the Earth Conservation Corporation, and environmental advocacy group, or the International Erosion Control Association, a professional association that provides education, resources, and business opportunities to its soil and erosion control members.

Exhibit 2-6	
NON-GOVERNMENTAL ORGANIZATIONS INTERVIEWED	
<i>Environmental NGO</i>	<i>On-Site or Phone Interview</i>
Conservation Law Foundation	Phone
Environmental Integrity Project	Phone
Low Impact Development Center	Phone
Public Employees for Environmental Responsibility	Phone

Finally, we solicited information from storm water experts in EPA's Headquarters Offices of OECA and OW. For OECA, IEC and Kerr conducted conference calls with the Office of Compliance to collect information regarding the development and delivery of compliance assistance materials; and the training for, and tracking of, compliance monitoring activities. We also conferred with the Office of Regulatory Enforcement for information regarding the development of storm water strategies, policies, and the development of nationally managed cases. Our primary contact in OECA is the Office of Planning, Policy Analysis and Communications which has been coordinating communication with OECA overall and ensuring the delivery of information for analysis. For OW, we consulted with staff responsible for

promulgating the storm water regulations and implementing the electronic Notice of Intent (NOI) database.

INFORMATION COLLECTION PROCESS

The sections below describe the information collection process for EPA Regional, State, industry, and NGO interviews conducted in person or by telephone. At the outset of each interview, IEc and Kerr reiterated the evaluation's goal of assessing the performance of OECA's program with respect to storm water construction activities, to identify effective approaches and areas for improvement, and to recommend implementable changes to improve program performance. IEc and Kerr also facilitated informational conference calls with EPA Headquarters staff from three OECA Offices and OW.

In addition, IEc and Kerr collected the following information for analysis: OECA's storm water policies, OW's Reports to Congress and economic analyses conducted in connection with rule promulgation, enforcement and compliance assistance activities retrieved from EPA databases, a recent Inspector General report, and a report about controlling storm water pollution in the Great Lakes States by an environmental NGO.

In-Person or Telephone Interviews of EPA Regions, States, Industry, and NGOs

IEc and Kerr coordinated the initial contact with the interview candidates and provided a copy of the interview questions to the potential respondents in advance. This process was intended to streamline interviews and give respondents time to gather information, as necessary. On the scheduled date, we visited or contacted the interviewee and conducted the interview. As interviews were completed, we finalized notes and began the analysis of quantitative responses.

Conference Calls with Headquarters Staff

At the outset of the evaluation, OPAAC scheduled a series of conference calls with EPA staff knowledgeable about the storm water program in OECA's Office of Compliance and Regulatory Enforcement. In addition, we conducted a conference call with Office of Water personnel responsible for promulgating the storm water regulations and for the electronic NOI database. These conversations provided us with an overview of storm water activities conducted by Headquarters and facilitated the gathering of critical information for the evaluation.

Data from EPA's ICIS Database

As part of the evaluation, we requested data from EPA's Integrated Compliance Information System (ICIS) regarding reported compliance assistance and enforcement activities. In particular, we requested information specific to storm water activities for the following fields: Expedited Settlement Offers, environmental benefits from enforcement actions, voluntary disclosures, compliance assistance outcomes achieved, inspection conclusion data sheets, entities reached by sector, compliance inspections including MOA priority inspections, civil investigations, citizen complaints, and EPA capacity building training.

Literature Review

In addition to data provided directly by interviewees and EPA Headquarters, we also reviewed published documents from EPA regarding the history of the storm water program. Key documents prepared by EPA are summarized in Exhibit 2-1 above (Phase I Storm Water Construction Data Sources) under General Enforcement and Compliance Assurance Reports and General Storm Water Reports. We also reviewed a report prepared by Abt Associates for EPA's Sector Strategies Program regarding models for providing on-site compliance assistance to construction sites.¹⁰ In addition, to provide context for our evaluation, we reviewed reports published by independent organizations evaluating NPDES enforcement, data tracking efforts, and the storm water program in particular. Specific reports reviewed include three evaluations by the EPA Office of Inspector General: *Water Enforcement: State Enforcement of Clean Water Act Discharges Can Be More Effective*,¹¹ *EPA Should Take Further Steps to Address Funding Shortfalls and Time Slippages in Permit Compliance System Modernization Effort*,¹² and *Congressional Request Regarding EPA Clean Water Enforcement Actions*.¹³ We also considered several additional reports prepared by several environmental groups and the National Academy of Public Administration regarding water quality enforcement and storm water pollution.¹⁴ Of these, the two reports most relevant to our evaluation were *Weathering the Storm*, which critiques EPA and the State efforts to address storm water pollution in the Great Lakes and *Stuck in the Mud*, which analyzes the General Storm Water permit as it is applied to construction sites

¹⁰ Abt Associates, *Considerations for Onsite Stormwater Assistance for Construction Sites*, November 12, 2004.

¹¹ EPA Office of Inspector General, Audit Report, *Water Enforcement: State Enforcement of Clean Water Act Discharges Can Be More Effective*, August 2001, Report No. 2001-P-00013.

¹² EPA Office of Inspector General, Memorandum Report, *EPA Should Take Further Steps to Address Funding Shortfalls and Time Slippages in Permit Compliance System Modernization Effort*, May 20, 2003, Report No. 2003-M-00014.

¹³ EPA Office of Inspector General, Special Report, *Congressional Request Regarding EPA Clean Water Enforcement Actions*, October 18, 2004, Report No. 2005-S-00001.

¹⁴ Environmental Integrity Project, *Weathering the Storm*, September 2004, http://www.environmentalintegrity.org/pubs/Weathering_the_Storm.pdf;

Tennessee Clean Water Network and Public Employees for Environmental Responsibility, *Stuck in the Mud*, October 2004, <http://www.tcwn.org/pdf/Oliver%20Creek%2011.19.04rvh.pdf>;

Environmental Defense, *Soiled Streams: Cleaning Up Sediment Pollution in North Carolina's Waters*, June 3, 1999, http://www.environmentaldefense.org/documents/159_NCSSbody.pdf;

Natural Resources Defense Counsel, *Stormwater Strategies: Community Responses to Runoff Protection*, May 1999, <http://www.nrdc.org/water/pollution/storm/stoinx.asp>;

National Academy of Public Administration, *Understanding What States Need to Protect Water Quality*, December 20002, <http://209.183.198.6/NAPA/NAPAPubs.nsf/0/75f6942779f2bf3985256cb1006ea1c4?OpenDocument>

in Tennessee. Environmental Defense's report *Soiled Streams* provides context for our evaluation by pointing out that the leading causes of sediment pollution in at least some areas of the country are not construction activities, but rather agriculture, municipal development, logging, and mining. The report from the Natural Resources Defense Council documents effective strategies used at the local level to control urban runoff pollution, including low impact development (LID) strategies. Finally, the report from the National Academy of Public Administration estimated the national funding gap for State water programs, and offers recommendations for how EPA and States can collaborate to more effectively implement the Clean Water Act.

DATA ANALYSIS PLAN

The responses from discussions with staff from EPA Regions, States, Trade associations, construction contractors, and environmental groups provide the foundation for the analysis in this evaluation. IEC and Kerr conducted both qualitative and quantitative analyses depending on the type of information available. Based on the different roles and responsibilities of the groups interviewed, the interview questions varied and not all responses are directly comparable. However, whenever possible, responses were compiled and/or aggregated in order to provide a summary of the viewpoints found within and across interview groups.

Analysis of Discussion Data

In general, IEC and Kerr developed qualitative analyses from interview data due to the small number and nature of responses. However, we provide basic counts and percentages when applicable. For example, we summarize the number of on-site compliance inspections and enforcement actions taken by Regions and States. However, we are generally not able to present data on the percentage of construction sites that experienced inspections or enforcement actions due to lack of data about the number of construction sites subject to Phase I construction storm water requirements. Much of the information collected in discussions and interviews is qualitative in nature. Thus, we developed narrative summaries that explain key findings from the discussion, and where possible suggest trends over time or across interview groups.

Performance Measures

In the context of program evaluation, performance measures are important for several reasons.¹⁵ First, they can help to identify those aspects of a program that are working well and those in need of improvement. Second, they inform determinations of whether resource allocations are yielding meaningful human health and environmental benefits. Third, they help communicate a program's value to managers and decision-makers.

¹⁵ U.S. Environmental Protection Agency, National Center for Environmental Innovation, Evaluation Support Division. *Improving EPA's Performance with Program Evaluation*. June 2003. <http://www.epa.gov/evaluate/generalbrochure2.pdf>

For each of the OECA's construction storm water program's major components – levels of compliance, key strategies and policies, compliance assistance, compliance monitoring, enforcement, and collaborations between OECA and Regional and State partners – we developed a set of performance measures that draw directly on the interview questions (Exhibit 2-7). For each performance measure, the exhibit briefly describes how we intend to use the data.

Exhibit 2-7 PERFORMANCE MEASURES TO ASSESS EFFECTIVENESS OF OECA's STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I CONSTRUCTION ACTIVITIES			
Program Component	Performance Measure	Data Source	Intended Use for Data
Levels of Compliance	Number of permitted construction sites compared to number of construction sites subject to Phase I storm water construction requirements.	Regional and State interviews; 1999 OW Phase II Economic Analysis; NAHB's Housing Economics Online; NOI permitting databases.	Identifying the level of compliance with storm water regulations in the construction industry may help in targeting future efforts and in updating priority areas.
	Nature of non-compliance.	Regional, State, Industry, and NGO interviews.	Understanding the nature of non-compliance may help in determining what type of compliance materials are most needed.
Key Strategies and Policies	Number of Regions, States, and Industry respondents reporting increase in effectiveness of implementation efforts as a result of key strategies and policies.	Regional, State, and Industry interviews; strategy and policy documents.	Knowing the extent to which OECA's strategies and policies supporting implementation of the construction storm water program at the Regional and State levels may help in identifying ways to maximize effectiveness of strategies and policies.
Compliance Assistance	Number of representatives from Regions, States, and regulated community reporting use of compliance assistance materials developed by OECA and OC.	Regional, State, and Industry, and NGO interviews.	Identifying the extent to which regulated entities are using compliance assistance materials developed by EPA may help in developing future compliance assistance efforts.
	Number of interviewees reporting that delivery mechanisms for compliance assistance materials serve the needs of the regulated industry.	Regional, State, and Industry interviews.	Understanding the extent to which compliance assistance materials are reaching the intended audience may help in ensuring that the delivery mechanisms chosen to communicate compliance assistance are tailored to the construction industry.
Compliance Monitoring	Number (and percentage) of regulated industry subject to compliance inspections.	Regional and State interviews; ICIS database; 2004 IG Report.	Knowing the extent to which OECA has or supports a storm water compliance monitoring presence with respect to the construction industry may help in targeting future compliance monitoring efforts.
Enforcement	Number (and percentage) of regulated industry subject to enforcement actions, by category of action (i.e., administrative order, administrative penalty order, civil referral, etc.).	Regional, State, Industry, and NGO interviews; ICIS database; 2004 IG Report.	Identifying if there is evidence of a deterrent effect from inspections or enforcement actions may help in targeting future enforcement efforts.

Exhibit 2-7

PERFORMANCE MEASURES TO ASSESS EFFECTIVENESS OF OECA'S STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I CONSTRUCTION ACTIVITIES

Program Component	Performance Measure	Data Source	Intended Use for Data
Collaborations: Sharing of Information and Resources	Number of Regions and States reporting support from OECA in implementation of the construction storm water program.	Regional and State interviews.	Identifying what types of OECA assistance Regions and States find most useful may help in establishing program priorities for OECA.

Overall, this evaluation demonstrates OECA's commitment to ensuring compliance with Phase I construction storm water requirements and offers suggestions for improving performance through increased collaboration on compliance strategies to meet the needs of the regulated sector. The discussion of specific evaluation findings is organized by the six overarching evaluation questions outlined in Chapter 1:¹⁶

1. What is the level of compliance with storm water regulations in the construction industry? (*Level of Compliance*)
2. What effect are OECA's key policies having on the ability of EPA Regions and States to implement the Phase I storm water compliance and enforcement program; and on the behavior of the construction industry? (*Key Strategies and Policies*)
3. Are EPA's compliance assistance materials being used? If so, how are they being used and are they effective? (*Compliance Assistance*)
4. What is the level of compliance monitoring done by EPA? (*Compliance Monitoring*)
5. How is enforcement being conducted in this sector and is it effective? (*Enforcement*)
6. How does OECA foster effective sharing of information and resources to leverage Regional and State resources? (*Collaboration and Data Sharing*)

Question one above provides a key benchmark for assessing the success of OECA's construction storm water program. The remaining questions address activities OECA undertakes to improve compliance with requirements. These activities include developing strategies and policies, providing compliance assistance, monitoring compliance, taking enforcement actions, and collaborating and sharing data with co-regulators. Importantly, most of these activities are undertaken not only at the Federal level, but also at Regional, State, and local levels. Thus the

¹⁶ Terms in parenthesis above indicate the section of the chapter corresponding to each evaluation question.

effectiveness of OECA's program depends to a significant degree on its ability to lead, support, and coordinate with co-regulators who are responsible for implementing the Phase I construction storm water program. Comments from Regions and States throughout this chapter provide insights on OECA's influence in the storm water program within their jurisdictions. In addition, comments from industry trade associations, individual contractors, and environmental provide additional perspectives on the effectiveness of the storm water program as it is perceived by these key stakeholders. Detailed findings tables that summarize the responses of each stakeholder group to the interview questions are included as Attachments F through I. The chapter closes with an overall assessment of OECA's progress in the storm water area as seen in responses to the key questions posed in the evaluation.

LEVEL OF COMPLIANCE

One of the key goals for OECA's Phase I construction storm water program is improving compliance with storm water requirements. Calculating compliance rates includes identifying permit coverage (i.e., the percentage of construction sites that file a Notice of Intent (NOI) and obtain a permit) as well as substantive compliance (the percentage of permitted sites that prepare and implement an adequate SWPP, and install and maintain appropriate BMPs). Since the universe of Phase I construction sites is large, constantly changing, and often not known to regulators, it is very difficult to estimate compliance rates. Current data available on levels of compliance are described below, along with suggestions for ways that EPA could improve its understanding of compliance rates.

It is Difficult to Estimate Permit Coverage

Two key pieces of data are needed to estimate permit coverage: the number of regulated sites that have obtained a permit, and the number of entities subject to applicable requirements. The degree to which each of these numbers can be estimated is considered in turn below.

Estimating the universe of Phase I construction sites is quite difficult. The Phase I construction storm water universe is constantly in flux with new sites entering the field and completed sites exiting the field. Building starts and population growth can serve as proxies for construction activity in a particular region of the country, but will not precisely identify the number of five acre and larger construction sites that have the potential to discharge into waters of the United States. Even if certain construction sites meet the Phase I size requirement, they may be exempt from permitting due to their location in a geographically arid section of the country. EPA estimates in its October 1999 Report to Congress on the Phase II Storm Water Regulations that there are 188,425 Phase I construction starts per year.¹⁷ However, none of the Regions or States interviewed had readily accessible, up-to-date information on the number of construction entities in their jurisdictions subject to Phase I storm water requirements. Trade associations interviewed did not have data on the number of construction sites subject to Phase I storm water requirements. While the number of housing starts annually is readily available (for example, the National Association of Home Builders reports that there were 1,847,700 housing

¹⁷ See http://www.epa.gov/npdes/pubs/ReptoCong_PhII_swr.pdf, p. III-6.

starts in 2003¹⁸), these figures do not account for other types of construction such as commercial, industrial, or public construction works. Moreover, these statistics do not identify the size of construction sites, and so it is difficult to determine the number of sites comprising five or more acres.

States interviewed had readily accessible data on the number of NOIs that had been filed in their jurisdiction for 2002 through 2004, and all Regions had comparable data for non-authorized States for 2003 or 2004. While these data are readily available, they are not tracked in a centralized location for authorized States, and therefore it was necessary to ask each State individually for data on permittees. For 2004, seven States report 13,383 NOIs filed.¹⁹ Data on permittees covered by the Federal General Construction Permit (i.e., construction sites in non-authorized States) is tracked through the federal electronic-NOI (eNOI) system, and is readily available. Nine Regions report 4,807 NOIs filed for non-authorized States in 2003, and the tenth Region reports 1,407 NOIs filed for non-authorized States in 2004.

Without readily-available nationwide data regarding the number of sites subject to Phase I requirements, it is not possible to determine what percentage of regulated construction sites are covered by a Phase I NPDES construction storm water permit. In the absence of direct data on the extent of permit coverage, an alternate indicator of compliance is the degree to which permit applications have increased over time. Most States interviewed for this evaluation report increasing numbers of permit applications, ranging from a 43 percent increase in Kansas from 2002 to 2004 to a 250 percent increase in Alabama from 2000 to 2004. (Some of these figures may include Phase II construction, as States were not readily able to distinguish permits for large vs. small construction sites.)²⁰ California reports steady numbers of permit applications every year, while Georgia says that permit applications have increased in recent years. Total NOI submissions for the seven States reporting this data exceed 13,000 in 2004, an increase of 67 percent from the previous year.²¹ However, given that the number of construction sites may be increasing at a similar rate, it is not possible to tell from readily available data whether permit coverage is increasing over time.

While respondents describe the challenges of identifying the total number of construction sites subject to Phase I requirements, there are apparent opportunities for State and local governments to identify the regulated universe by coordinating with local building inspectors and enabling electronic submission of NOIs for State permits. These opportunities are described below.

¹⁸ See Annual Housing Starts (1978-2003) published by the National Association of Home Builders (NAHB). <http://www.nahb.org/generic.aspx?sectionID=130&genericContentID=554>, accessed December 29, 2004.

¹⁹ Information on this point has not yet been obtained from the State of Washington.

²⁰ For Alabama, figures from 2002 and the beginning of 2003 should include only Phase I construction, but figures beginning in the latter part of 2003 and in 2004 probably include Phase II construction. This same caveat probably applies in Kansas as well.

²¹ Some of these estimates include Phase II as well as Phase I sites.

Local Governments that Issue Building Permits Interface Routinely with the Construction Universe

Interviews with States reveal a number of creative approaches that have been used to systematically track down construction sites and make sure that they have submitted NOIs. Several States use the process of obtaining building or grading permits as a way to identify new construction sites. In Georgia and Kansas, some local governments will not issue a building permit until the builder demonstrates that he has submitted an NOI or received a storm water permit. In other cases, States use the list of sites that have received building permits to cross-check the list of NOI applicants in order to identify non-filers. For example, in Maryland counties send the State a list of grading permits to make sure each construction site has an NOI. In Washington, the county construction checklist includes the need to apply for a storm water permit. The experience of these States suggests that if the information obtained by those issuing local building permits could be tracked and aggregated, it would enable EPA to assess the extent of permit coverage for Phase I construction sites.

Electronic-NOI Database System Could Track Permittees at the State Level

Many of the Regions interviewed reported that the federal electronic Notice of Intent (eNOI) system has dramatically improved their ability to track storm water permittees, and some Regions note the benefit of the eNOI system in educating builders about the permit requirements and the process of getting a permit. However, the eNOI system only applies to the Federal General Construction Permit. While States do have internal data systems to track NOIs (along with other data), at least some States would value an eNOI system that could be used for State general permits. Although Colorado staff explicitly express their desire to develop an eNOI system, they are constrained by lack of sufficient resources. Arizona, a recently authorized State for NPDES permitting, is using in part a State Innovation grant from EPA to develop an electronic NOI system. If an eNOI system for States were developed in a single database platform, or if support for State eNOI systems were provided with standard methods for tracking permitting data, it would enable EPA to compile statistics on the number of permittees nationwide.

Compliance Rates Can be Calculated for Inspected Sites, but Not All Permitted Sites

The second level of inquiry regarding compliance status involves determining what percentage of the permitted universe is in compliance with the storm water requirements. Unfortunately, there are no readily available data on the percentage of the permitted universe (let alone the entire Phase I construction universe) in compliance with requirements. This is because inspectors often target inspections to those sites that are believed to be out of compliance (e.g., based on tips from local regulators, citizen complaints, or windshield assessments). This practice of conducting targeted inspections is consistent with EPA's Smart Enforcement Strategy and represents a reasonable use of limited inspection resources. However, this approach makes it difficult to assess overall levels of compliance, since those sites inspected are not a representative sample of all construction sites. None of the respondents interviewed had conducted a survey in a randomly selected set of construction sites in order to assess overall compliance with storm water requirements.

In lieu of compliance rates among all permitted construction sites, another indicator of compliance is the percentage of inspections that result in enforcement actions. Based on compilations of data from Regional interviews, 42 percent of on-site compliance inspections resulted in enforcement actions in 2003. This percentage also does not indicate the gravity of the violation and whether the non-compliance resulted in harm to the environment. Also, this estimate is based on readily available data provided by Regions, and may not represent a comprehensive summary of all enforcement actions or inspections. Corresponding data from States suggest that the percentage of on-site compliance inspection resulting in enforcement actions ranges from less than one percent to 55 percent. However, lack of data on enforcement actions or inspections, as well as the difficulty of distinguishing Phase I and II sites, may prevent these figures from accurately representing State activities.

In addition to the data on the percentage of inspections that result in enforcement actions, anecdotal evidence can provide some qualitative (but not verifiable) indicator of levels of compliance. While regulators were not asked to provide estimates of compliance rates, two NGOs volunteered that in their experience there is a low level of compliance with the requirements. One of these NGOs (the Tennessee office of PEER) estimates that 80 percent of sites in the area are failing to meet substantive compliance, and 50 percent of sites are not meeting paper requirements.²² None of the NGOs reports that storm water pollution from construction sites has decreased since 2000, and in fact one NGO believes that Phase I storm water pollution has increased since that time. Another reports that there are many newly impaired river segments, especially in high growth areas.

Random Inspections Would Enable Estimates of Compliance Among All Sites

OECA expressed an interest in what methodology would help EPA get a handle on the state of compliance. In order for OECA to estimate compliance rates among all permitted construction sites (or among all construction sites, including those that do not have a permit), it would be necessary to conduct inspections at a representative sample of sites (e.g., a random sample). If OECA were interested in conducting this type of assessment, inspections could be coordinated nationally, in order to minimize the burden of inspections to Regions and States. Statistical methods for estimating compliance rates based on random inspections are outlined in existing guides developed for EPA.²³

Summary

We propose two key indicators to assess current levels of compliance with storm water requirements. The first of these is the percentage of regulated construction sites covered by a Phase I NPDES construction storm water permit. There are not sufficient data to estimate the degree of permit coverage, although Regions and States report that awareness of permitting requirements has increased in the construction industry, particularly in 2003 and 2004. Working

²² These estimates are only anecdotal and are not based on a review of data.

²³ See, for example: U.S. EPA Office of Enforcement and Compliance Assurance, *Guide for Measuring Compliance Assistance Outcomes*, EPA300-B-02-011, Revised June 2002, <http://www.epa.gov/Compliance/resources/reports/planning/results/comeasuring.pdf>

with local regulators to improve data on the number of regulated construction sites and providing an e-NOI system for State general permits could enhance EPA's ability to assess overall permit coverage. Integrating storm water requirements with standard procedures for receiving a building or grading permit could also help increase awareness of storm water requirements and ultimately permit coverage. In addition to permit coverage, a second indicator of compliance is the percentage of the permitted universe in compliance with the storm water requirements. Available data based on targeted compliance inspections are not representative of the entire construction industry. However, estimates for the percentage of inspections that result in enforcement actions are an average 42 percent for EPA regions, and range from one to 55 percent for States interviewed.

KEY STRATEGIES AND POLICIES

The nationwide storm water strategies that OECA issued in 2000 and 2003 have set the course for compliance and enforcement activities regarding Phase I construction sites. EPA Headquarters have called upon Regions and States to use the strategies to guide their compliance and enforcement efforts. In addition, Exhibit 3-1 charts the chronology of OECA's Memorandum of Agreement Guidance to Regions and States from 1998 to 2004 and the new National Program Guidance for the years 2005 to 2007. This chronology shows OECA's increasing focus on Phase I construction storm water activities in the MOA Guidance documents, and establishes the need to set performance goals and measures for each national priority area in the National Program Guidance. Over time, OECA strategy for targeting compliance monitoring and enforcement has evolved from focusing on non-filers in 2000 to targeting priority sectors and watersheds beginning in 2003.

Exhibit 3-1	
OECA MEMORANDUM OF AGREEMENT GUIDANCE (1998-2004) AND NATIONAL PROGRAM GUIDANCE (2005-2007)¹	
Date	Storm Water Guidance
FY 1998/1999	<ul style="list-style-type: none"> Begin assessment of storm water issues/develop strategy, p. 9. <p>Note: Storm water becomes a priority area.</p>
FY 1999 Update	<ul style="list-style-type: none"> Storm water compliance and enforcement is a priority, but several guidances/regulations are not complete at this time. The guidance on storm water phase I ... is expected to be available to the Regions in FY 98-99. ... <i>EPA is in the process of issuing the 1998 Storm Water Enforcement Strategy, which provides direction on prioritizing inspections and enforcement of ... construction requirements for phase I industrial storm water dischargers</i>, p.7.
FY 2000/2001	<ul style="list-style-type: none"> Because there is such a potentially large number of storm water dischargers, including Federal facilities, regions will need to strategically target compliance monitoring, compliance assistance, and enforcement activities in this area. In general, regions should address CSOs and SSOs before turning to major storm water initiatives. Regions should focus storm water inspections and enforcement where there is water quality degradation and/or a threat to public health, p.7. OECA/OC will be developing the compliance monitoring tools which will include a series of inspection checklists for the Storm Water Management Phase I regulations, Attachment 7, p.1.
FY 2002/2003	<ul style="list-style-type: none"> Implement program to ensure compliance with all applicable regulations and with the: ... 2000 Storm Water Enforcement Strategy Update, p.3. Regions should continue to implement the "2000 Storm Water Enforcement Strategy Update"

Exhibit 3-1	
OECA MEMORANDUM OF AGREEMENT GUIDANCE (1998-2004) AND NATIONAL PROGRAM GUIDANCE (2005-2007) ¹	
Date	Storm Water Guidance
	<p>and complete the sweep(s) initiated to identify ... large construction sites that have failed to apply for storm water permit coverage or that are in violation of the requirements of their permit. Regions should prioritize storm water inspections, compliance assistance, and enforcement actions where there is water quality degradation and/or a threat to public health (e.g., storm water discharges contributing to impairment of a watershed, a drinking water source, issuance of a fish advisory, beach closure, or shellfish bed closure).</p> <ul style="list-style-type: none"> • Watershed and sector storm water targeting initiatives and expedited settlement efforts should be expanded in other regions in FY2002/2003. • OECA will provide support to ensure national consistency and to encourage the use of compliance incentive and compliance assistance programs in this area. Compliance assistance should continue for the Phase I Storm water Rule ... p.6.
FY 2004	<ul style="list-style-type: none"> • Implement compliance and enforcement activities to ... be consistent with ... the <i>2003 Storm Water Compliance and Enforcement Strategy</i>, p.3. • The total number of storm water dischargers is estimated to be several hundred thousand. According to the "2000 National Water Quality Inventory Report to Congress," storm water runoff continues to be a leading cause of water quality impairment in waterbodies assessed by the States. • OECA has developed a <i>2003 Storm Water Compliance and Enforcement Strategy</i> to guide efforts in addressing significant environmental problems resulting from non-compliance with the storm water requirements. Sector-based (e.g., large developers and big box stores) and watershed-based (e.g., Anacostia River watershed) approaches to compliance and enforcement efforts are encouraged, as well as innovative tools such as expedited settlements, p.4.
FY 2005-2007 ²	<ul style="list-style-type: none"> • [I]n order to ensure that we are achieving desired results, and to better manage our efforts, we will develop a performance-based strategy for each of the selected national priorities. The strategies will contain performance goals and measures, as well as communication and exit strategies, p.3.
<p>1 The text included in this table is quoted directly from the MOA and National Program Guidance with relevant page numbers indicated. Italic text appears in the sources, while text in bold represents a note that we added. See http://www.epa.gov/Compliance/resources/policies/planning/index.html for links to all of these sources.</p> <p>2 EPA's recent Performance-Based Strategy for the storm water national compliance and enforcement priority (discussed below) includes, for example, the following performance measures: Between FY'05 and the end of FY'07, EPA will target at least 70% of storm water inspections and compliance assistance towards priority sectors or watersheds, p. 4.</p>	

An indicator of the effectiveness of OECA's storm water program with regard to strategies and policies is the number of Regions, States, and industry respondents reporting an increase in the effectiveness of their implementation efforts as a result of OECA's key strategies and policies. Interviews with Regions and States reveal the extent to which they are implementing the strategies and using the tools that OECA developed as part of the 2003 strategy. The results of these interviews are described in the sections below.

2000 Strategy Highlights Phase I Construction Storm Water

The 2000 Storm Water Enforcement Strategy Update signed by Eric Schaeffer encourages EPA Regions and States to shift the focus of their storm water enforcement efforts from major municipal separate storm sewer systems (MS4s) to industrial storm water dischargers, including construction sites disturbing five acres or more.²⁴ The 2000 strategy asserts that while outreach and assistance have been used in the past as the primary ways to ensure compliance, current efforts to achieve full compliance should center on enforcement. The strategy suggests that Regions and States focus on "non-filers," i.e., those facilities which had not filed for a permit to discharge and set out an enforcement hierarchy for non-filers.

In reflecting on the role of the 2000 strategy on their programs over the last four years, many Regions say that the strategy was widely followed, and that it heightened attention to existing Regional storm water compliance and enforcement efforts. Several Regions state that the strategy issued by Headquarters echoed efforts already underway at the Regional level, although some Regions say that the issuance of the 2000 strategy caused a shift in Regional priorities (e.g., from CAFOs to storm water, or to a focus within construction storm water specifically on non-filers). A few Regions also note the value of the strategy in providing political support for Regional enforcement actions. Others praise the fact that additional inspection resources were made available through Headquarters' contractor support. In general, the Regions' impression of the 2000 strategy is that it provided a focus for Regional and State efforts, but that it did not significantly change the Regions activities because the Regions were already operating in line with the strategy.

Interviews with Regions and States provide evidence that they are currently using several of the approaches advocated by the 2000 strategy. For example, the strategy recommends that Regions place their first priority for compliance monitoring and enforcement on construction sites where no State or local programs exist or such programs are ineffectual. Regions with a mix of authorized and non-authorized States are clearly following this approach by focusing their compliance and enforcement efforts on non-authorized States. The 2000 strategy also recommended that Regions establish a mechanism for promptly addressing citizen complaints and acknowledged the importance of citizen complaints in identifying potential violators. Citizen complaints are often used in targeting inspections, particularly in States but also in several Regions. However, many Regions and most States do not have data systems that track citizen complaints specifically related to construction storm water.

A primary focus of the 2000 strategy -- its recommendation to focus on non-filers -- remains a challenge for Regions and States. As described earlier, Regions and States have difficulty identifying the universe of construction sites in order to pinpoint the owner/operators who have not filed Notices of Intent (NOIs). Some of those interviewed differ in their perceptions about the extent to which owner/operators are failing to file NOIs: four Regions rank failure to submit an NOI as one the of the top two violations frequently found during inspections, while only one State shares this assessment. However, without better data on the universe of Phase I construction entities, it is difficult to assess the degree to which the issue of non-filers laid out in the 2000 strategy has been met.

²⁴ <http://www.epa.gov/compliance/resources/policies/civil/cwa/stmwtrstra.pdf>

In summary, the 2000 Storm Water Enforcement Strategy Update outlines a coordinated approach to addressing violations for Phase I construction storm water. Regions and States perceive this strategy as consistent with their ongoing efforts, and have continued to implement several key aspects of the strategy. However, a central challenge identified in the strategy still remains, namely the difficulty of identifying non-filers. This issue may present an opportunity for OECA to provide additional support for Regions and States in order to fulfill the goals of the 2000 Strategy.

2003 Strategy Promotes Risk-Based Targeting

The 2003 Storm Water Compliance and Enforcement Strategy builds on the 2000 strategy by requiring Regions to develop and implement watershed- and/or sector-based storm water enforcement strategies within one year (i.e., by August 2004).²⁵ The 2003 strategy provides model enforcement approaches that demonstrate how to use risk-based targeting to identify storm water dischargers causing significant environmental impacts. The model sector-based approach describes the Office of Regulatory Enforcement's efforts to target large-scale construction activities, such as commercial development of big-box stores and large national home builders. The model watershed-based approach describes how OECA and Region III developed a compliance and enforcement initiative for Phase I storm water facilities in the Anacostia River watershed. The 2003 strategy also outlines several tools that will be or have been made available to Regions and States, including:

- a storm water training program for new inspectors and enforcement officers;
- an Expedited Settlement Offer (ESO) program;
- supplemental guidance for applying the Clean Water Act (CWA) Penalty Policy to storm water;
- field tools, including inspector check-off sheets and compliance assistance materials; and
- enforcement tools, including a legal forms database for storm water, enforcement strategies, and non-compliance scoring criteria.

A majority of Regions say the 2003 strategy affected their storm water compliance and enforcement programs in some way. For example, the strategy caused several Regions to focus more on storm water, construction, compliance assistance, watersheds, or big box retail. Other Regions say the 2003 strategy reaffirmed the approach the Regions were already taking and provided them a better roadmap for their activities. Most Regions are using at least some of the tools developed as part of the 2003 strategy, such as the ESO offer and the supplemental guidance for applying the CWA penalty policy to storm water. However, not every Region

²⁵ <http://www.epa.gov/compliance/resources/policies/civil/cwa/stwenfstrategy2003.pdf>

found the 2003 strategy itself helpful. For example, one Region said that staff has been too focused on their ongoing storm water work to devote much attention to implementing the 2003 strategy. Other Regions raise the concern that it takes significant time and resources to implement such a strategy, and that Headquarters should be attuned to the limitations that Regions face in this regard. In fact, only two Regions so far have submitted their Regional strategies in response to the 2003 national strategy.

Interviews with Regions and States suggest that they are using a variety of different approaches to target compliance and enforcement efforts, many of which reflect the model approaches illustrated in the 2003 strategy. For example, several Regions are targeting inspections on large and big box developers. Other common approaches that Regions are using to target Phase I construction inspections include following up on referrals from States or citizen complaints, and focusing on particular geographic areas (such as urban areas of areas with many home sales). Only one Region currently reports taking a watershed-based approach. States also report using a variety of different targeting methods, such as taking tips from local regulators and following up on citizen complaints. No States report focusing on large developers, but a few States have targeted particular watersheds or other areas with poor soils and high growth.

While the interviews do suggest that States and Regions are focusing on aspects of a risk-based approach to targeting as called for in the 2003 strategy, only one jurisdiction, Region 1, has articulated its approach as a written risk-based strategy.²⁶ This is probably due, at least in part, to the relatively recent issuance of the 2003 strategy. Interviewees point out that it takes time to respond to and implement strategies issued by EPA Headquarters, particularly since these strategies need to be addressed in the Performance Partnership Agreements between Regions and States. Moreover, changing strategies requires resources, particularly where Regions and States are called upon to maintain their enforcement presence in non-priority areas. Some interviewees express frustration that strategies are issued by Headquarters with little perceived involvement from Regions. Perhaps as a result of this perception, some interviewees have not made responding to the strategy a high priority. There may be an opportunity for EPA Headquarters to initiate a dialog with each Region, and Regions in turn with States, about how the risk-based approach to address storm water violations could be best applied in that jurisdiction, taking into account current targeting efforts based on other criteria (e.g., citizen complaints, referrals from local regulators, etc.). Moreover, there may be untapped opportunities to combine elements of the sector-based and watershed-based approach in order to target specific types of developers (e.g., large construction companies) in watersheds where sediment is a leading pollutant.

Tools Developed as Part of the 2003 Storm Water Compliance and Enforcement Strategy are Widely Used

Regions and States report widespread use of the tools made available as part of the 2003 strategy. The interviews with Regions and States specifically addressed use of the Expedited Settlement Offer (ESO) program and the supplemental guidance for applying the CWA penalty policy to storm water. Both of these tools are discussed in turn below.

²⁶ Region 5's storm water strategy focuses on different strategies such as targeting efforts at the corporate level of large construction companies and developing centers of excellence and expertise among Region 5 states relating to construction site storm water control.

Expedited Settlement Offer

A majority of Regions have positive responses to the ESO. Six Regions are currently using the ESO. Some Regions appreciate the ability to address non-compliance more rapidly with the ESO compared to traditional enforcement, and thereby leverage the Region's enforcement presence. Regions also report that the ESO has raised awareness of the Phase I requirements, thus driving demand for compliance assistance and training. A few Regions express concerns about the ESO, but the concerns vary in their nature. One Region says that the existence of the ESO undercuts existing enforcement cases by holding out the prospect of lower penalties under the ESO. Other Regions say that the ESO should be more widely used, and that certain limitations on its use (e.g., restrictions to small sites and first time violators) should be lifted. Some Regions also note that the ESO has to be modified for each State permit, and that this severely limits its use. Finally, some Regions observe that there is no significant reduction in paperwork required for the ESO as compared to traditional enforcement. This may be a function of an early implementation phase in which Regions are becoming familiar with the ESO. EPA Headquarters anticipates full time equivalent (FTE) employee savings compared to other types of enforcement actions, and is currently revising the ESO policy to address concerns raised by the Regions.

Interviews with industry trade associations and contractors reveal a variety of different perspectives on the ESO. Some say the ESO has the potential to benefit everyone by expediting the response when a violation is found. Most interviewees mention that they think the ESO checklist is helpful because it defines what owners/operators must do to be in compliance. One builder says that the ESO amounts to "extortion," whereby builders have been told they cannot ask the inspector questions or point out perceived errors in the inspection report unless they are willing to give up the opportunity to participate in the ESO. Some builders suggest that EPA should allow them to correct minor violations without incurring a penalty. On the other hand, another builder notes that the penalties for the ESO are far less than the cost of putting up a silt fence, and so penalties would have to be higher in order to make the tool effective over time. Industry trade associations and contractors point out that the penalties for the ESO are currently structured so that the fines for not having a permit or SWPPP are less than the fines imposed for having an incomplete SWPPP. This creates a perverse incentive for builders to not submit an NOI or prepare a SWPPP, or even if they have prepared these documents, to claim ignorance of them during an inspection. Finally, several of the trade associations and contractors interviewed say that the ESO should be modified so that it is accessible even to contractors who have had a violation in the past.

Supplemental Guidance on CWA Penalty Policy

Nearly all Regions are using the supplemental guidance, at least to some degree. Regions report that the penalty policy was initiated at the Regional level, by Region 8, and as such it meets a clear need that Regions have for a simple, consistent procedure to assess penalty amount. Regions would like some help with specific aspects of applying the penalty policy guidance, such as determining the economic benefit of compliance. However, in general, responses to the guidance are very positive, and some would like to see its use expanded to other industrial sectors.

Performance-Based Strategy for Storm Water National Compliance and Enforcement Priority

In July 2004, OECA issued a performance-based strategy for achieving compliance with the storm water requirements. The performance-based strategy identifies goals and measures for assessing environmental results of the storm water program and progress towards compliance. The strategy also identifies compliance assistance, inspection, and enforcement tools that OECA has prepared to help improve compliance with storm water requirements and describes how the tools will be used to achieve desired results. Finally, the strategy identifies an exit strategy that proposes performance thresholds that should be achieved before storm water is reclassified from a priority area to part of the core program.

The performance-based strategy proposes annual tons of sediment from federal cases as an indicator for environmental results from construction cases. Regions and States were asked whether they are estimating sediment reductions as called for in the performance-based strategy. Most Regions interviewed are using the methodology recommended by Headquarters to estimate sediment reductions from enforcement cases. One indicator of sediment reduction in this methodology is the soil loss equation. These data are recorded in the Case Conclusion Data Sheets (CCDS) and then reported to Headquarters. A few Regions report that they have not been estimating sediment reductions (Regions 1, 5, and 10). Some Regions report that they do not have confidence in the soil loss equation model (Regions 1, 8, and 9). Critics of the model say it gives an inaccurate perception of precision and that it relies on too many assumptions that are not supportable. These Regions suggest using different measures of environmental results, such as acres protected by a SWPPP. Region 10 reports that they would like to measure environmental results, but that there are no CCDS for the 54 ESOs conducted in this Region, so in effect they are not getting credit for the environmental results of these cases. This appears to be an instance where additional clarification is needed to inform Regions that ESOs are equivalent to administrative penalty orders, and therefore may be recorded on the CCDS in that category. States interviewed do not track sediment reductions, although one State (Maryland) does measure results by tracking percent of inspected sites in significant compliance.

In summary, the 2003 strategy elicited mixed responses. Some say the strategy provides a helpful roadmap and an important way for EPA to communicate its expectations to Regions and States about storm water enforcement and compliance activities. Others find the strategy to be intrusive, and requiring resources and attention that Regions feel would be better spent on current Regional efforts. While many respondents are implementing elements of risk-based approaches called for in the 2003 strategy, few have developed comprehensive sector- or watershed-based approaches. The tools associated with the 2003 strategy have, for the most part, been welcomed and used by many Regions, however some respondents do offer suggestions for how the tools could be improved.

Summary

Responses to the nationwide storm water strategies that OECA issued in 2000 and 2003 and corresponding enforcement tools and policies suggest that the strategies have provided a focus for Regional and State efforts. However, respondents differ in their views of the policies in part because Regions and States have different histories with regard to their own storm water efforts. Some Regions and States have long-established storm water programs, while others have only recently focused on storm water in response to EPA Headquarters identifying storm water as a priority. Those with established programs are likely to be less receptive to Headquarters initiatives, unless they see that the national efforts build on the experience and perspectives of Regional and State efforts. Where EPA Headquarters has been able to take a successful experience at the Regional level and scale it up to the whole country (e.g., as in the case of the penalty policy guidance), responses tend to be positive. Overall, the number of Regions reporting that OECA's strategies and policies helped in their storm water program implementation efforts varies depending on the particular strategy. The policies that most Regions seem to find helpful in their storm water programs are the ESO and the Supplemental Guidance on the CWA Penalty Policy. States are indirectly affected by OECA's strategies through interactions with the Regions, but our interviews do not provide a clear indication of the number of States that find these strategies and policies helpful.

COMPLIANCE ASSISTANCE

OECA has invested substantial time and resources in the development of compliance assistance resources to help the construction industry comply with EPA's storm water requirements. While it has produced some written materials including a brochure on requirements for the construction industry, the Office's primary focus has been on the development of website resources for industry. Using the web-based approach, OECA has also coordinated to some extent with OW to ensure that all headquarters storm water compliance assistance materials for the construction industry can be accessed through either Office's website.

This section reviews the extent to which OECA's materials are being integrated into the storm water compliance assistance efforts of EPA's Regions and State storm water programs for the construction industry. While the interviews with the Regions and selected States generally provide useful qualitative information, there is very little reliable quantitative data on: (1) the volume of materials used by either the Regions or the States; (2) the delivery mechanisms or approaches for compliance assistance outreach that would be more effective in meeting the needs of the regulated community; or (3) the extent to which these compliance assistance materials effectively change behavior. Many of those interviewed recommend alternative delivery approaches, particularly based on in-person contact, for which they believe there is meaningful anecdotal evidence of success. In addition to interviewing Regions and States, we also asked industry representatives and trade associations about their perspectives on compliance assistance efforts. This section summarizes key findings emerging from our assessment of OECA's compliance assistance efforts.

Major Investments in Developing Compliance Information for the Construction Industry

OECA's major effort has focused on providing web access to a comprehensive array of rules, technical information and general guidance from EPA, States and other sources on the requirements for Phase I (and now Phase II) construction sites. These materials include resources available both through the National Environmental Compliance Assistance Clearinghouse (NECAC) and the EPA-funded Construction Industry Compliance Assistance (CICA) website. OECA has also developed a brochure outlining construction site requirements ("Federal Environmental Requirements for Construction"), available for distribution by Regions and States to industry, and OECA has included articles on the construction sector in the OECA Enforcement Alerts, which are distributed to EPA's Regions and the States.

To assist in better targeting the development of the construction industry's compliance assistance materials, OECA's Office of Compliance led a national construction workgroup with the industry (including representatives of NAHB and AGC) to assess industry compliance assistance needs and gaps in currently available compliance assistance resources. The CICA website, managed by the National Center for Manufacturing Sciences, is one of the products shaped by that collaborative effort. The website, described by one national association as "one of the best construction-specific resources available," contains an array of information on storm water (and other) environmental requirements for contractors, including:

- summaries of major rules, permitting and planning requirements;
- links to EPA OECA and Office of Water (OW) compliance assistance resources;
- links to industry association resources;
- SWPPP requirements and examples;
- links to State websites for State TMDL programs and for State storm water rules, permitting requirements and compliance assistance information; and
- information on issues such as BMPs for storm water.

In addition to the information available through the CICA, OECA has additionally provided access to compliance assistance materials for the construction sector through the electronic compendium of compliance assistance tools (ECCAT) on NECAC. Contractors, State and local agencies and others can choose from several focus areas, including storm water management for the construction industry and erosion and sediment control, and then search for specific types of support materials (e.g., websites, guidance documents, posters, etc.).

While many of those interviewed do not question the role of Federal, State, or local regulators in providing compliance assistance, some respondents, and all of the NGOs, say that enforcement, not compliance assistance, should be the primary focus of OECA's efforts. One NGO add that while the public should bear some of the costs of training industry, builders and developers (especially for sites over five acres) have sufficient resources and should pay for the costs of compliance assistance themselves. NGOs express a concern that government resources

put towards compliance assistance may detract from efforts to bring sites into the regulatory system and enforce the law.

Use of OECA's Compliance Assistance Materials Varies

Knowledge of, and use of, OECA's compliance assistance materials varies widely. Regions are generally familiar with the CICA website, and most refer people to it and pass out information about it at meetings, training programs, conferences, etc. Several Regions mention the benefit of having model SWPPPs on the website, but one Region also questions the sufficiency of the model SWPPPs. The Regions are familiar with the 1992 guidance manual, but generally are concerned that it is out-of-date (e.g., with respect to recommended BMPs). Four Regions suggest that the guidance manual should be updated. The other more frequently-used or –recognized compliance assistance materials prepared by headquarters are the “Stormwater and the Construction Industry” poster²⁷ and the brochure, “Does Your Construction Site Need a Stormwater Permit? A Construction Site Operator's Guide to EPA's Stormwater Permit Program.”²⁸ The remaining construction storm water compliance assistance resources the Regions were asked about are little used by the Regions and, in some cases, rarely recognized.²⁹ The reasons why some Regions use the construction storm water compliance assistance resources developed or disseminated by OECA differently than other Regions appear to include the following: two Regions report that OECA's compliance assistance efforts are not reaching the correct audiences of local governmental planning departments and field operators for

²⁷ Most Regions provide positive assessments of the poster. Two Regions report seeing the poster in use in the field, either in State offices or at construction sites. A few Regions note that there were originally errors on the poster, but that those have been corrected. In some cases, Regions have been unable to get sufficient copies or large-format copies of the poster for distribution. One Region suggests that it would be useful to have versions of the poster with BMPs specific to particular types of construction operations. Some also suggest that OECA prepare a version of the poster in Spanish. Only one Region expresses doubts about the value of the poster.

²⁸ While a number of Regions report distributing the brochure, one Region suggests that the brochure include telephone numbers contractors could call for assistance.

²⁹ These include:

- the National Environmental Compliance Assistance Clearinghouse
- the list of construction sector compliance assistance tools on NECAC
- OECA Enforcement Alert
- OW's storm water month website
- Storm water Pollution Prevention Plans Guidance Manual (1992)
- the “Stormwater Pollution Found in Your Area!” door hanger
- “Federal Environmental Requirements for Construction”
- “After the Storm”

Staffs from about half the Regions are aware of each of the other websites and brochures in the list above. No more than three Regions report distributing or providing references to any of these. This lack of use appears to be due primarily either to the Regions' lack of familiarity with the resources or to their view that alternative resources (such as CICA discussed above or Region-developed materials) are superior for the intended industry audience. There are some positive comments from those using the materials. For example, one Region commented that the “Federal Environmental Requirements for Construction” effectively puts a spotlight on the Construction General Permit. Another Region notes that, while it has not distributed the “After the Storm” brochure, it finds that the related video is very helpful. The one Region that reports distributing the OECA Enforcement Alert issues with construction storm water information notes that the Alerts are useful for State and local regulators, and for raising the awareness of enforcement in the industry.

contractors, the limited availability of full-time employees dedicated to Phase I storm water compliance requires Regions to make hard choices between enforcement and compliance assistance activities, and the materials generated at the Federal level do not address Region- or State-specific needs.

While a majority of States interviewed have seen the OECA compliance assistance materials and sites, none of the States report distributing or referring anyone to any of these materials. One State has used the CICA for its own purposes, but feels that the State website is far easier for industry and local agencies to use. With respect to the OW materials, all the States have seen the 1992 guidance manual, and one had referred to it during development of the State construction general permit. However, none of the states refer industry or local agencies to the 1992 guidance manual, either because of differences with the State program or perceived complexity for the audience of construction site workers they were most interested in reaching. For “Does Your Construction Site Need a Permit?,” the storm water month website and the storm water door hanger, only one State reports distributing or referring people to these materials; less than half have seen the door hanger. A majority of States have seen the construction storm water poster and “After the Storm;” two States report using each of them. Two additional States indicate interest in using the poster if they could get modifiable electronic copies in order to adapt the text to match State requirements.

Regions differ in the extent to which they emphasize the compliance assistance materials developed by headquarters. While half of the Regions rely largely on some of the materials developed by headquarters, others have developed their own materials with additional information or targeted to specific Regional needs. In addition, many Regional websites provide links to State programs or expert information available through industry associations or organizations specializing in erosion control or other storm water-related subjects. Examples of additional Regional materials include analyses of pitfalls in implementing BMPs, common problems found during EPA inspections, a SWPPP checklist, an overview of erosion and chemical contamination issues at construction sites, Region-specific fact sheets about the program and information on Regional programs for tribal areas. Some Regions also provide links on their websites to State and/or county programs.

Several Regions identify specific areas where additional storm water compliance assistance materials for construction would be useful. These include clearer information on who is the correct operator responsible for preparing the SWPPP (one Region), additional materials on applicable TMDLs (two Regions), additional information on BMP selection and design adequacy (two Regions), a self-inspection form for contractors (two Regions) and a video training film demonstrating on-site compliance issues and self-inspection approaches (two Regions). The importance and value for industry of developing self-inspection checklists and supporting training materials is independently confirmed by our interviews with NAHB and AGC.

Authorized States predominately distribute compliance assistance materials they have developed to explain the specific requirements of their own programs.³⁰ Their compliance assistance programs and materials make little or no distinction between Phase I and Phase II construction requirements. States distribute compliance assistance materials specific to their own programs, including handbooks, guidance documents, brochures and fact sheets. While some of these materials are for general distribution (e.g., with permit applications, during training programs, etc.), others are detailed technical manuals. Some States make an effort to target their compliance assistance and compliance information materials to specific audiences within the construction sector, including engineers, operators, contractors and developers.

Some of the State compliance assistance materials are developed by the State agency separately, but often the State agency contributes to a joint effort with other organizations in the State. For example, the *Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites* (2 volumes) is published by the Alabama Soil and Water Conservation Committee with the participation of the Alabama Department of Environmental Management (ADEM), USDA-NRCS, Auburn University and others. Many of the States have similar handbooks with detailed information on management requirements and selection, design and maintenance of BMPs. Some States have also produced highly-condensed small versions of these documents for use in the field (e.g., the *Field Manual for Erosion and Sediment Control in Georgia: BMPs for Land Disturbing Activities*).

All of the States interviewed have websites for construction storm water issues. Resources may include general program descriptions and requirements as well as detailed technical manuals. A majority of these States make extensive use of direct contacts – through trainings, conferences and on-site compliance assistance – to disseminate compliance information and compliance assistance materials (discussed in more detail below).

Regions and States Use a Variety of Channels for Disseminating Information

Regions pursue a variety of routes to provide information about storm water compliance requirements to the construction industry. Some of these involve direct interaction with contractors. But more commonly, given the sheer volume of construction and numbers of contractors and the limitations of staff and travel funding, Regions rely on indirect approaches (e.g., training State and local agencies, disseminating guidance or other materials or posting information on Regional websites). For most of these activities, there is little Regional data to quantify the scale of the outreach. One Region reports distributing in the range of 5,000 to 10,000 brochures through meetings and mailings, and 300 to 400 construction storm water posters; and Region 6 which has the most extensive construction storm water web site records 1,274 hits in February of 2000 and 1,037 hits in June of 2003.³¹

³⁰ The summary of compliance assistance approaches by States is based on responses from the California Sacramento/Central Valley Regional Water Board and the seven States interviewed for this report – Alabama, Colorado, Georgia, Kansas, Maryland, Nevada and Washington.

³¹ This number should not be considered ‘representative’ for other Regions, since it is unusually extensive, and at least one other Region refers contractors to the Region 6 site. Region 6’s web site may be found at: <http://www.epa.gov/region6/6en/w/sw/home.htm>.

The highest volume of Regional direct compliance assistance contacts with industry comes through training programs, conferences and meetings with the industry. Nine Regions report conducting training sessions (ranging from one to 14 per year for each of the Regions) for the construction sector – either jointly with State or local agencies or independently. Audiences include contractors, specific construction companies, home builders' associations, and others in the industry. While few Regions have reliable information on the numbers of industry personnel who have participated in training workshops, the combined estimates of the two Regions reporting the highest numbers of training sessions averages about 900/year. Seven Regions report meeting with industry representatives with varying degrees of frequency. These meetings may be either with individual companies or with State or local associations (e.g., State or local affiliates of AGC, NAHB, ASCE, etc.). Regions also occasionally sponsor or participate in conferences focused either solely or in part on construction storm water issues.

On-site visits potentially provide the most direct way for Regions to offer compliance assistance to industry, but this is also the approach to compliance assistance least frequently used. Only four Regions reported on-site visits specifically for the purpose of compliance assistance. With the exception of one Region that reports contractor-conducted compliance assistance visits that reached hundreds of potential permittees, compliance assistance site visits were limited to one or two per year (in one case only for federal facilities). Three Regions report providing limited compliance assistance as part of on-site compliance inspections. All of these direct contacts with industry and non-federal agencies provide an opportunity for distribution of both Region- and headquarters-generated compliance assistance materials to reinforce, sustain and/or further explain the message of the meetings and training workshops.

Many of the States have developed outreach programs to increase the level of in-person contact with construction industry personnel. The major component of this effort involves extensive training programs, sometimes supplemented by participation in conferences as well as meetings with State and local industry associations. In a few States, there is also an on-site compliance assistance component – either independently or as part of the compliance inspection. For example, while Maryland has no separate compliance assistance visits, if an inspector sees that a site is in need of compliance assistance, the inspector will provide information or instructions on correction (e.g., for a non-trenched part of a silt fence). When the inspector goes back a second time, if the problem has not been fixed, the inspector will cite the operator for a violation. If the problem has been fixed, the inspector gets credit for providing compliance assistance. Using that definition, there were 851 compliance assistance actions (in over 9,000 inspections) in 2003.³² Although not as formally structured as Maryland's program, the majority of the States contacted indicate that they provide some level of compliance assistance during compliance inspections. There are a few instances of limited compliance assistance visits to construction sites (generally in response to requests) – e.g., in Alabama and Georgia – but these comprise a negligible percentage of the total State inspection efforts.³³ There are also models for State on-site compliance assistance programs for small businesses geared towards other

³² In Maryland, the State has delegated responsibility for the storm water program to local jurisdictions in over half the State (including the major urban areas). These numbers reflect only actions by the Maryland Department of the Environment, which is responsible for the non-delegated counties and for federal and State projects. The numbers also do not differentiate between Phase 1, Phase 2 and smaller sites down to 5,000 square feet, which have all been regulated in Maryland since the 1970s.

³³ For example, Alabama provides about 200 compliance assistance visits out of over 4,000 inspections.

environmental requirements. For example, the Texas Commission on Environmental Quality's Small Business and Local Government Assistance provides technical assistance on air, water, waste, and pollution prevention issues. This technical assistance is offered confidentially, without the threat of enforcement, to businesses with 100 or fewer employees.³⁴

Several of the States invest substantial resources in training programs for industry. Staff from Georgia DNR and Maryland's Department of the Environment, for example, conduct about 30 construction storm water training classes a year. Rough State estimates of the numbers of construction industry personnel reached by these training programs since 2000 range from several hundred to several thousand (though, as above, there is no way to distinguish between those working on Phase 1 and Phase 2 projects). In addition to the direct training, some States have collaborated in designing, approving and/or implementing training programs offered by independent experts (e.g., Colorado) or trade associations (Alabama, Maryland and Washington).

States Combine Training with Certification Requirements

Some States link compliance assistance to on-site requirements and responsibilities. Two of the States interviewed, Alabama and Maryland, have linked a compliance assistance training program to construction on-site certification requirements. Table 3-2 below provides an overview comparing the basic features of these two programs. Washington is exploring a similar approach.

The design of the Alabama and Maryland programs focuses especially on aspects of the compliance challenge for construction sites which were highlighted by both States and Regions – proper implementation and maintenance of BMPs, and the importance of trying to increase the awareness and change the behavior of onsite construction workers to reduce related violations. The difficulty of developing compliance assistance strategies that get the attention of workers doing clearing, trenching and grading work onsite presents significant challenges. While most States and Regions agree that increased physical presence of inspectors would be ideal, they also generally agree that with the large number of changing construction sites, sufficient inspection resources are unlikely to become available.

The compliance assistance strategies adopted by Maryland and Alabama try to bridge at least part of this gap through providing storm water management training for on-site construction staff, and pairing the training with a requirement that builders assign at least one person who has gone through the training to each of their construction sites. The goal is to assure that someone at the site understands the potential environmental impacts of pollution from construction activities, how to prevent those impacts, and the State and Federal requirements.

The approach has garnered positive response from both States and industry. ECOS has recognized Alabama's approach as innovative. NAHB speaks positively about both the Maryland and Alabama programs, and one contractor has positive comments about the Alabama approach. The Home Builders Association of Alabama (HBAA) has won two awards for Best Community Service program and one Best Governmental Affairs program from NAHB for its role in developing and implementing the Alabama program. In Washington, the initiative to

³⁴ Abt Associates, *Considerations for Onsite Stormwater Assistance for Construction Sites*, November 12, 2004.

develop a similar approach has trade association support. In addition, Region 4 identifies the continued development and expansion of the Alabama program as a significant accomplishment in its 2004 NPDES mid-year program review.

No systematic evaluation of the success of these approaches has been undertaken, either by doing a before/after comparison of compliance levels or through a comparison with States with generally comparable regulatory environments without such programs. But the potential adoption of a similar program by Washington suggests both the importance of such an analysis and a potential opportunity for at least a before/after evaluation design. In addition, there are some significant differences in the Alabama and Maryland approaches, and an evaluation would provide an opportunity to identify the effectiveness of specific components of each program (e.g., the effect of having a periodic recertification requirement).

Qualified Credentialed Inspectors (QCIs) in Alabama

Alabama's Department of Environmental Management (ADEM) has tackled the problem of raising the level of understanding of storm water management at construction sites through the creation of a new group of specially trained construction workers – Qualified Credentialed Inspectors, or QCIs. ADEM initiated the QCI program in 1999, and formalized it in regulations in 2003.³⁵ Most important, operators of construction sites must ensure that, at every site, “at least one onsite employee shall maintain valid QCI Certification.”³⁶ The requirement that an onsite employee have QCI certification is not a requirement that the QCI be onsite at all times. A single QCI may represent multiple sites, but must be readily available at any of those sites to assure the sites meet regulatory requirements.

To become a QCI, a construction company employee must go through a brief basic training program on storm water management. Under a Memorandum of Agreement between the Alabama Department of Environmental Management (ADEM) and the Homebuilders Association of Alabama (HBAA), HBAA offers a one-day training course on storm water management, followed by a test on the concepts and information taught during the program. The course was developed by HBAA³⁷ with the support of ADEM, and is approved by ADEM. Employees taking the course and passing the test receive QCI certification. There are two important features of the QCI certification:

³⁵ QCIs don't need to be professional engineers or landscape architects (called, in Alabama's regulations, Qualified Credentialed Professionals, or QCPs). But they now perform some of the basic storm water management roles at construction sites which would otherwise require QCPs. All roles of QCI may alternatively be carried out by a Qualified Credentialed Professional (QCP) – most commonly a licensed engineer – or a qualified person working under the direct supervision of a QCP. Only a QCP may prepare a Construction Best Management Practices Plan (CBMPP).

³⁶ Alternatively, the operator may employ or contract with a QCP, or a qualified person (e.g., an engineer in training) under the direct supervision of a QCP, to perform the duties assigned under Alabama's regulations to a QCI. If the operator chooses to rely on a QCP, however, the QCP must be “readily available and able to be present onsite as often as is necessary to ensure full compliance” with Alabama's construction storm water regulations (Section 335-6-12-.19 of Alabama's regulations). With a limited pool of engineering expertise in an active construction market, however, the “readily available” requirement is a challenge for all but the largest construction companies.

³⁷ HBAA provided \$50,000 for the development of the program.

- Certification is not forever. Rules and technical approaches change. To retain certification, the employee must complete a half-day refresher course every year.
- The certification does not apply to the employee alone. It is a co-certification of both the employee and the construction company. This has several consequences. First, the employee can not move to another company and retain QCI certification; for the employee to become a QCI at the new company, that company would have to pay for re-training. Second, consulting firms can not provide QCIs; the QCI role is designed to increase the in-house understanding of storm water control at construction sites. Finally, in the event of a violation onsite, the co-certified construction company can not point to errors by the QCI employee as a mitigating factor.

ADEM participates with HBAA in each training program (generally about 1 per month). Since the inception of the training program in 1999, over 2,400 people have been certified. Currently 1,700 have their QCI certification. Quite commonly, construction companies will select site foremen to go through the training. While the training is currently offered only under the auspices of HBAA, it has become a collaborative effort between HBAA and other organizations in the State – for example, AGC and the Alabama road builders. Under a consent decree, the Alabama Department of Transportation (ALDOT) agreed to have those working for them on construction sites go through QCI training, and ALDOT partnered with HBAA to provide the training; HBAA and ALDOT held 22 courses for 1100 participants between December 2003 and April 2004. But the agreement with HBAA is not exclusive; ADEM is currently reviewing the application of a consulting firm to become an additional provider of QCI training.

A major goal for ADEM in the development of the QCI certification has been to increase the capacity of construction operators for onsite storm water management self-inspection. Even though they are not engineers, the QCIs are trained in what to look for, and can play a proactive role in assuring that the site avoids storm water pollution. The basic roles of the QCI onsite involve BMP implementation and maintenance and self-inspection. The self-inspection includes daily inspections of the portion of the site on which work is being done, comprehensive monthly inspections, and inspections after any 0.75-inch 24-hour rainfall. The QCI maintains inspection records and reports to the operator on any deficiencies at the site.

Maryland's Green Card Requirement

Maryland's Green Card program differs from Alabama's QCI program in that it provides less specificity on the role to be played by the holder of the Green Card. But the goal of the program is similar -- to promote a higher level of onsite understanding and attention to the prevention of storm water pollution from the construction sites. Since the early 1980s, the Maryland Department of the Environment (MDE) has provided training on storm water management for people working on construction sites. Those who complete the half-day training program and pass a test afterwards receive a Green Card from the State. Currently, those who

earn Green Cards require no periodic refresher courses, but many come back for re-training after changes in relevant regulations.³⁸

MDE both provides Green Card training classes directly and trains and authorizes trainers in other organizations to offer the Green Card program. The two MDE trainers teach about 30 classes per year, reaching about 600 people working at construction sites. In some cases, MDE will provide training onsite. In addition, large organizations such as Baltimore Gas and Electric and Maryland's highway department now provide the training program to their own employees. Maryland also has several counties with delegated sediment and erosion control programs that are authorized by MDE to offer the program within the county. Since the program began over two decades ago, over 17,000 people have received Green Card training. In the absence of a recertification requirement, it is uncertain how many of those trained are currently active.

MDE requires every construction site to have at least one Green Card holder onsite to oversee sediment control and storm water management. This is not a 24-hour 7-day-a-week requirement. But it does require that there be at least some way to get in touch quickly – for example, a cell phone number. Particularly with smaller sites, builders may assign a Green Card holder to more than one site. MDE staff point to two major benefits of the Green Card program:

- It assures that there will be someone working on-site for the contractor who is familiar with the basic requirements, methods and reasons for storm water controls, and who can help to promote a proactive approach to preventing storm water pollution during construction. (An approximate ratio of just under 500 active construction sites for each MDE inspector for sites directly regulated by MDE illustrates the importance of having on-site personnel who understand the issues³⁹).
- It provides a readily-identifiable on-site person for inspectors to communicate with about storm water management requirements and deficiencies.

MDE staff also emphasize that the Green Card program is likely to work best in tandem with a strong enforcement presence. Green Card training makes construction site employees aware of the basics of storm water management water quality issues, regulatory requirements, technical approaches and self-inspections, but MDE staff point out that it is important to fortify attention to these lessons with compliance inspections.

³⁸ MDE does have regulatory authority to require re-training after three years, and might consider applying such a requirement when there are major regulatory changes. The regulatory basis for the Green Card program is at Code of Maryland 26.17.01.06.

³⁹ MDE has delegated authority for erosion and sediment control to the majority of Maryland's counties. MDE directly regulates federal and State agency construction sites as well as sites in the remaining non-delegated counties.

Table 3-2.

Key Components of Alabama Qualified Credentialed Inspector and Maryland Department of the Environment's Green Card Programs

	ADEM Qualified Credentialed Inspector (QCI)	MDE Green Card Holder
Roles/Responsibilities	Ensure proper implementation/maintenance of QCP-designed BMPs; site self-inspections (e.g., daily on portion of site on which work being done, post-rainfall), except where rules specifically require inspections by QCP.	Green-card holder is expected to be alert to potential erosion issues and control requirements. No specific regulatory requirements as to role.
On-Site Requirement	At least one onsite employee shall maintain valid QCI Certification. The employee(s) holding QCI Certification need not be on-site continuously and they may represent multiple sites.	At least one on-site employee must have green card. Not a 24/7 requirement, but at least cell phone where that person can be reached.
Initial Training/Certification Requirements	Attend full-day training program and pass exam at end of program.	Half-day training and pass exam at end of program.
Training Content	Approved programs provide training in the requirements of the Alabama NPDES rules, the Department's construction storm water management program, evaluation of construction sites to ensure that QCP-designed and -certified BMPs (detailed in a CBMPP) are effectively implemented and maintained, and evaluation of conveyance structures, receiving waters and adjacent impacted offsite areas to ensure the protection of water quality and compliance with State requirements.	Physical processes (ecological and resource values of water, negative impacts of sediment and storm water, erosion process, erosion potential of soils, controlling storm water runoff and sedimentation, effects of development), institutional and regulatory framework for sediment control (history, law and regulations, program structure, on-site personnel responsibility), standards and specifications for erosion and sediment control.
Re-certification Requirements	Annual recertification. Four-hour refresher course.	Valid for three years with automatic renewal. MDE considering whether to require refresher course at regular intervals. Many holders return for training when standards are revised.
Ownership of Certification	Co-certification of individual and builder. If certified individual moves to a different building company, must obtain new certification.	Individuals retain green card certification.
Organizations Offering Training	Currently only offered by Homebuilders Association of Alabama (HBAA). Other organizations (e.g., AL Department of Transportation) have partnered with HBAA to offer program for their employees. ADEM currently reviewing application of additional potential provider (consulting firm).	MDE offers training, and has also trained trainers in other organizations who offer program, including delegated counties, Baltimore Gas and Electric, State highway department.
Role of State Agency in Training	Must approve content of program and authorize organizations to offer program. ADEM staff participate in each training program.	Developed and modify program, provide training, train trainers for other organizations that offer program independently.

In-Person Delivery of Compliance Assistance Viewed as Most Effective

Experiential field data supports the value of in-person outreach strategies designed to reach construction workers engaged in land-disturbance activities. State, Regional, and trade association respondents emphasize the importance of reaching large segments of the regulated community (comprised primarily of small business operators) through direct, rather than web-based, approaches. In-person technical assistance is also preferred over the distribution of, or reference to, extensive technical guidance manuals that serve the needs of storm water professionals better than contractors operating in the field. While there is no quantitative data to assess the impacts of different delivery mechanisms for compliance assistance to the construction industry, the Alabama and Maryland state models and the industry's experience with OSHA's program (described below) suggest a need for OECA to reconsider its "wholesale" approach to compliance assistance.

While the EPA Region and State storm water programs have more direct contacts with local agencies and contractors than EPA headquarters, there has been some direct distribution by headquarters of construction-industry storm water compliance assistance materials and information about the clearinghouse. OECA compliance assistance staff, for example, take information on the clearinghouse to numerous conferences, although they do not generally distribute materials specific to the storm water program. OW has distributed several thousand copies of a construction storm water poster to industry associations and to companies in the Agency's NOI database as well as companies operating in non-authorized States, federal facilities and tribal areas directly administered by EPA.

Both NAHB and AGC emphasize the importance of face-to-face and on-site compliance assistance. AGC notes that its members believe OSHA's hands-on compliance assistance approach to be a model approach that is greatly appreciated and extremely effective. Under OSHA's Consultation Services program (OSH-CON), the contractor can request an OSHA compliance assistance visit and then has the opportunity not only to correct problems but to get into a self-audit cycle in partnership with OSHA that involves measures more stringent than those required by OSHA.⁴⁰ NAHB pointed to the Alabama and Maryland programs as examples where the face-to-face interaction was beneficial both to the construction companies and the agencies.

Regions recommend emphasizing in-person outreach strategies to the extent possible with limited resources. Four Regions specifically stress the importance of trying, within current resource constraints, to increase direct contact with contractors. One EPA storm water specialist noted that, even among Phase I site contractors, those working on five to eight acre sites are most frequently small businesses. Some of the recommended increases in in-person compliance assistance efforts would involve direct efforts of Regional staff, such as providing increased training outreach. For example, two Regions are interested in working with professional or trade associations to develop videos on self-inspections that can be used by associations, companies

⁴⁰ A recent report prepared for EPA's Sector Strategies Division profiled the OSH-CON program along with other models for on-site compliance assistance. See Abt Associates, *Considerations for Onsite Stormwater Assistance for Construction Sites*, November 12, 2004.

and local agencies for training programs for on-site construction staff. This approach involves working with intermediary organizations to expand the reach of limited Regional resources.

Many States have substantial direct outreach programs to industry, and are exploring ways to expand these programs. All eight of the States regard outreach involving in-person contact as the most effective means by which they currently communicate storm water compliance assistance information to the construction industry. The Alabama program summary above demonstrates a blending of direct contact through training and making use of intermediary organizations (e.g., HBAA). Alabama is also interested in increasing the involvement of local-level organizations in the State QCI program, while Washington is considering launching a similar effort. For Maryland, the training program is backed up by a compliance inspection program with a relatively high emphasis on compliance assistance. In addition, the State is able to provide an overall high field presence through the combination of 20 field staff for the non-delegated regions and construction activities in the State and an additional 110 field staff in the delegated counties and municipalities. Other States believe they have clear evidence of the effectiveness of the impact of direct contact. One State, for example, while noting that there was no formal statistical analysis, said that the impressions of inspectors is that when the agency holds training programs in counties where there have been concentrations of construction storm water complaints, there are significant reductions in non-compliance rates after the workshops.

Summary

The findings from this section reflect significant variation in the type and scale of compliance assistance approaches offered by Regions and States. Nonetheless, there are some general themes about compliance assistance for the construction storm water requirements. First, OECA's compliance assistance materials are used more by Regions than by authorized States. States focus on providing their own materials to the construction industry that reflect State-specific programs and requirements; their use of EPA headquarters materials is limited. Some Regions prefer their own compliance assistance materials to those developed by headquarters, and in the Regions that make active use of the headquarters materials, a few resources are more widely used. Second, the effective dissemination of OECA's compliance assistance materials to industry is very uncertain. There are no good numbers on the copies distributed to industry through mailings or during trainings, conferences or on-site visits. And while websites may be useful for the consulting engineers who develop SWPPPs, it is questionable whether these resources are accessed by the construction field staff that implement and maintain the BMPs. Finally, some Regions and many States have developed alternative approaches to delivering compliance assistance that might provide opportunities for future collaboration between headquarters, the Regions and the States in developing and delivering more effective compliance assistance.

COMPLIANCE MONITORING

A key indicator of the effectiveness of the OECA's storm water program in terms of compliance monitoring is the number (or percent) of the regulated industry subject to compliance inspections. In addition to conducting inspections, regulatory agencies conduct additional

compliance monitoring activities, including investigations, record reviews, targeting, and responding to citizen complaints. The discussion below presents the current status of Regional and State compliance monitoring activities for Phase I construction storm water, as well as trends in compliance monitoring since 2000. Then we present our findings regarding the extent to which compliance assistance is offered during inspections, the need for additional training to conduct inspections of construction storm water activities, and the value provided by contractor support to supplement scarce Regional resources. We also consider the importance of developing priority-specific data systems to track progress, the need for more risk-based targeting of Regional and State inspection resources, and alternative compliance monitoring approaches presented by several States.

Compliance Monitoring Status: Current Data and Trends Since 2000

EPA Regions have data regarding their compliance monitoring levels for construction sites for 2003 and 2004. Exhibit 3-3 presents the number of storm water compliance inspections, information requests, and responses to citizen complaints for these two years.⁴¹ In 2003 (the year for which all Regions have data), a total of 1,565 compliance monitoring activities were conducted for Phase I construction. Of these activities, 994 were on-site compliance inspections. At the State level, nearly 13,000 on-site compliance inspections were conducted in five States (AL, CA, CO, KS, and MD) in 2004, an overall increase from the prior two years. The number of inspections in 2004 per State range from 24 inspections in one State to 8,777 inspections in another State.⁴² EPA may wish to consider additional research efforts to determine the impact and efficiency of different levels of state inspection activity.

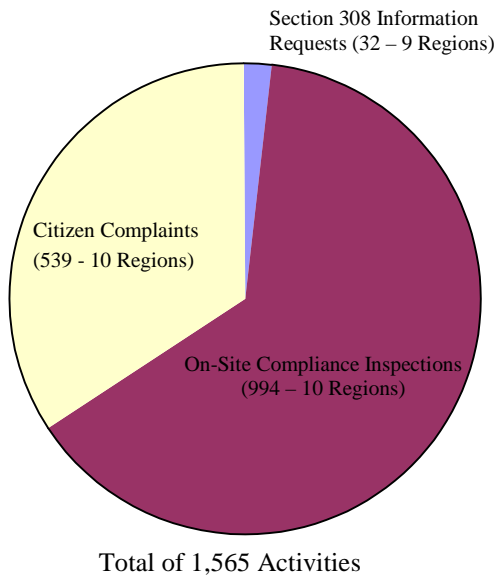
⁴¹ Most Regions were able to provide data for 2003, while the 2004 data represents a subset of Regions based on readily available information obtained during interviews.

⁴² These figures include Phase II as well as Phase I construction sites, since States cannot always distinguish between the two programs. In all States but Maryland, 2002 figures include only Phase I sites, while 2004 figures include both Phase I and II. In Maryland, both years may include Phase I and II sites.

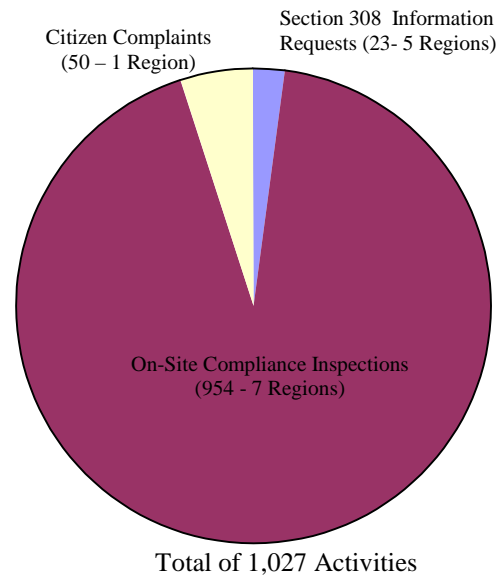
Exhibit 3-3

COMPLIANCE MONITORING CONDUCTED BY EPA REGIONS

2003



2004

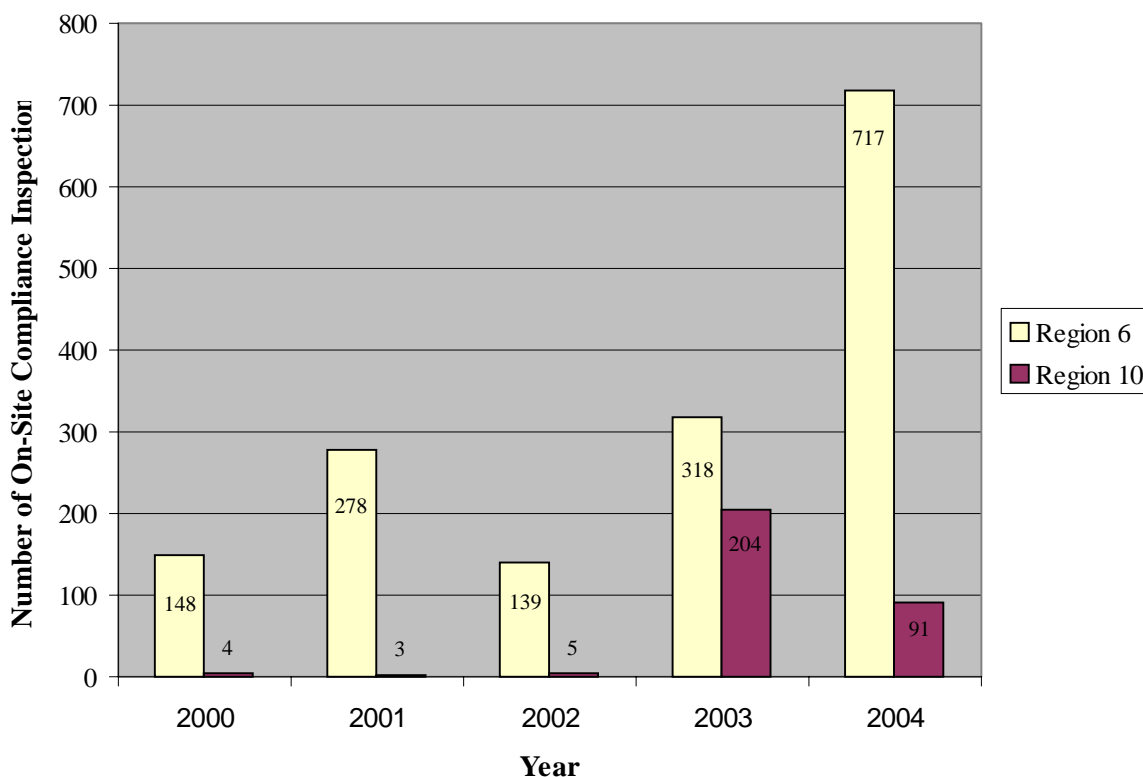


Source: Regional Interviews.

Trend data for on-site compliance inspections from 2000 to 2004 is only available from Regions 6 and 10. Region 6 data for inspections reveals a fluctuation in the years 2000 through 2003, and then a sharp increase in 2004 (this may at least partly be the result of inclusion of Phase II sites in 2004 and/or use of the ESO policy). Region 10 data, on the other hand, reveals a concentrated effort in 2003 to generate 203 inspections as opposed to a handful in the prior years, and then a decline in 2004 to 91 inspections. Exhibit 3-4 presents this data.

Exhibit 3-4

2000-2004 ON-SITE COMPLIANCE INSPECTIONS FOR REGIONS 6 AND 10



Source: Regional Interviews. Note, figures for Region 6 are provided for the calendar, rather than fiscal, year.

Regions and States Provide Varying Levels of Compliance Assistance During Inspections

As part of compliance monitoring activities, inspectors may provide appropriate compliance assistance during inspections. According to OECA's June 25, 2003 national policy on *The Role of the EPA Inspector in Providing Compliance Assistance During Inspections*, inspectors "are encouraged to provide appropriate general, and limited site-specific, compliance assistance."⁴³ This assistance consists primarily of sharing standardized information and references with the site operator. The national policy precludes providing design information on a site's particular problem or engineering design or advising on technical solutions. The policy also acknowledges Regional and Headquarters' variation in sharing initial inspection results.

⁴³ U.S. EPA, *Role of the EPA Inspector in Providing Compliance Assistance During Inspections*, signed by John Peter Suarez, former OECA Assistant Administrator, June 25, 2003. See page 4 at <http://www.epa.gov/compliance/resources/policies/monitoring/inspection/inspectorrole.pdf>. An earlier report entitled *Role of the EPA Inspector in Providing Compliance Assistance*, September 21, 1998 can be found at: <http://www.epa.gov/compliance/resources/policies/monitoring/inspection/roleinspect.pdf>.

The purpose of the policy is to provide more consistency in how and when EPA inspectors provide compliance assistance. Because of the significant challenges faced by inspectors due to the scope of regulatory requirements, technological advances, limited time for reviewing and observing on-site procedures and practices, potential legal implications, and the potential to develop new policy in the field, this policy defines compliance assistance narrowly.

Regional interviews confirm that for the majority of Regions, compliance assistance provided by inspectors includes generic information and web site references, rather than suggestions for improving and maintaining BMPs. In the case of one Region, there appears to be a greater effort to identify problems and make suggestions for better site management. States also vary in the degree to which compliance assistance is provided during inspections. Several States (KS and NV) provide extensive compliance assistance, while other States view enforcement as the primary purpose of their inspections. Our evaluation findings regarding exit interviews at the end of on-site inspections may provide additional insight. All of the Regions report providing a closing conference or exit interview that in most cases identifies the deficiencies found at the site, requests any additional documentation needed, and explains next steps in the process. Some industry respondents, however, perceive these conferences as insufficiently detailed and not oriented toward assisting the regulated community correct violations. Other industry representatives say that closing conferences are rarely, if ever, provided.

While the 2003 policy approach to how inspectors provide compliance assistance may be generally appropriate across the Agency, our findings suggest that there is a need in the construction storm water context to develop a customized, on-site compliance assistance effort for large portions of the industry that represent small businesses. To implement this, OECA may want to consider training inspectors to provide specialized compliance assistance to this sector or using non-inspector EPA or contract resources to provide this service.

Training Needed for Storm Water Inspections of Construction Activities

OECA recently updated its inspector training manual to improve the quality and consistency of inspections. However, this updated manual does not include any specific material on storm water inspections for construction activities. Instead, Federal and State inspectors and the construction industry are now able to use the inspection worksheet for construction storm water activities that is available on the Agency's web site as part of its NPDES Compliance Inspection Manual.⁴⁴ This worksheet is based on the requirements of the general construction permit and references components of the ESO to facilitate use of this new inspection tool. A number of State and Regional inspectors emphasize the importance of specialized storm water training rather than the generic NPDES training, and industry interviewees perceive inconsistent inspector knowledge and expertise.

⁴⁴ See Appendix R for the storm water-specific section of the NPDES Compliance Inspection Manual at: <http://www.epa.gov/enforcement/resources/publications/monitoring/inspections/npdesinspect/index.html>

Contractor Inspection Services Supplement Scarce Regional Resources

Many Regions reference the value of supplementing their own scarce storm water inspection resources with contractor support. Region 5 also noted in its storm water strategy the need for additional training in evaluating the effectiveness of storm water management plans, or the effectiveness of related management practices. OECA provided contractor assistance for 156 inspections in the 2003-2004 time period, and in particular, provided contractor assistance to initiate the investigations into the large developer enforcement cases such as Wal-Mart. Regions also rely on contractor support to conduct the time-consuming and complex MS4 audits so that they can retain their focus on construction storm water sites.

Priority-Specific Compliance Monitoring Data Systems Needed to Track Progress

Although OECA has made considerable progress in recent years updating its compliance and enforcement data systems, much of the data is collected at the level of the overall NPDES program and does not provide detailed information regarding priority enforcement areas such as construction storm water activities. For example, Regions began collecting inspection information on Inspection Conclusion Data Sheets (ICDS) for reporting in FY 2002 for the NPDES program. According to our interview with Headquarters staff, the purpose of the ICDS is to provide a feedback mechanism that facilitates learning and leads to improved inspection techniques for a particular program. In addition, the Inspection Conclusion Data Sheet (ICDS) Implementation Plan states that objectives of the ICDS include: (1) demonstrating the environmental results of EPA's compliance inspections; (2) measuring EPA compliance inspection outcomes as mandated by the Government Performance and Results Act; and (3) recording the type and amount of compliance assistance provided during EPA compliance inspections.

However, inspection data for construction storm water activities are not readily available through OECA's Integrated Compliance Information System (ICIS). The measurement data for determining whether inspections are changing the behavior of the regulated community are not available for analysis. Inspectors are unable to determine the percent of construction site operators addressing deficiencies during inspections that result in reduced pollution, the type of actions begin taken, whether trends exist and demonstrate the need to change guidance provided to inspectors or to develop specific compliance assistance materials.⁴⁵

Inspection Targeting Predominantly Relies On Sector Approach or Referrals from States and Citizens

As discussed above in the Key Strategies and Policies section of this chapter, the 2003 Storm Water Compliance and Enforcement Strategy promotes risk-based targeting. However, most Regions and States are using either a sector-based approach or referrals from citizens and other regulatory entities to select which sites they will inspect. By contrast, Region 1 relies on a risk-based approach and "plans to focus its efforts on those construction sites that have the

⁴⁵ EPA, *Using Performance Measurement Data as a Management Tool*, June 10, 2002, p. 8. See <http://www.epa.gov/compliance/resources/reports/planning/results/perfmeastool.pdf>.

greatest potential for environmental harm.”⁴⁶ To implement this risk-based approach, the Region will consider the size of the site, its topography, soil erodibility and the quality and sensitivity of the receiving water. Region 1 also intends to consider storm water strategies utilized by other Regions.

In some cases, the presence of a large development in a heavily-populated area on the banks of an impaired river will provide an opportunity to merge targeting strategies.⁴⁷ Another approach that Regions could readily use is to compare the 305(b) list of sediment-impaired waters to the fastest growing counties in the United States. Section 305(b) of the CWA requires each State to conduct water quality surveys to determine a water body’s overall health and to report on impaired waters, defined as those waters that fail to meet designated use protection criteria. Using census data, we compared the locations of the sediment-impaired waters listed on Georgia’s 305(b) list, marked with diagonal lines on the Georgia map in Exhibit 3-5 below, to the twenty Georgia counties appearing on the Census Bureau’s table of the 100 fastest growing U.S. counties from April 1, 2000 to July 1, 2003, highlighted in fully shaded counties below. This analysis suggests that there is one county that meets both criteria, and may therefore deserve particular attention as part of an inspection targeting strategy. This type of analysis is not necessarily determinative, but can be helpful in allocating limited inspection resources.

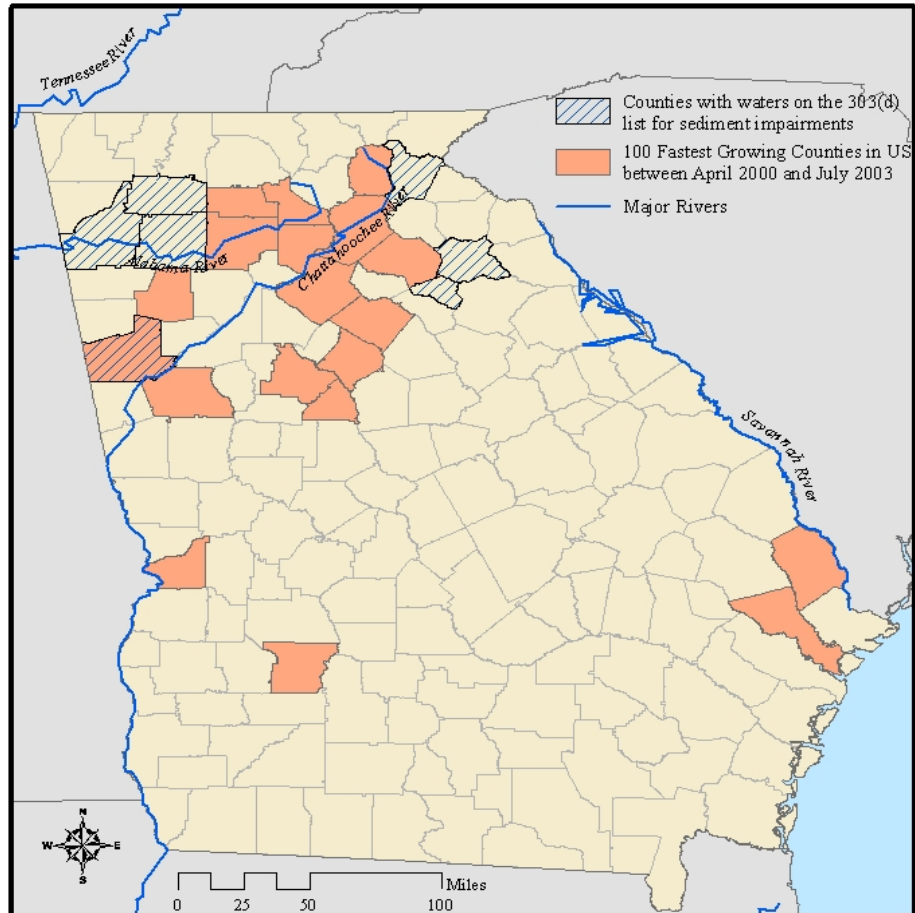
Respondents from environmental NGOs point out that a key measure of the success of the construction storm water program is the extent to which waters are polluted as a result of construction. While not a perfect indicator for specifically tracking construction storm water pollution over time, the 305(b) reports do provide periodic data on the number of water bodies impaired by sediment and turbidity. Based on its review of Region 5, the Environmental Integrity Group (EIG) points out that the number of river and stream segments impaired by turbidity and sediment is increasing, especially in areas with high growth. The Low Impact Development Center (LID) makes a similar point about the condition of the Chesapeake Bay. If the extent of sediment and turbidity is increasing, this may indicate that the storm water program is not effectively protecting waters from construction storm water pollution (potentially because there is increasing construction activity in the region). Moreover, while not a direct critique of enforcement efforts, EIG’s position is that anti-degradation requirements should prohibit States from issuing new permits in impaired watersheds, since even construction operators that properly implement BMPs still discharge silt and other storm water pollutants into waterways.

⁴⁶ EPA Region I, *2003 Storm Water Compliance and Enforcement Strategy: “Smart Enforcement” for Storm Water*, p. 2.

⁴⁷ For example, CLF describes a recent case it has been involved in related to a Lowes home center to be build on the banks of a tributary to Potash Brook, which is included on the State of Vermont 2002 303(d) List of Impaired Surface Waters. Because the proximity of the proposed to impaired waters, CLF argued that the is required to get an individual permit for storm water discharges, rather than being eligible for a general permit. The case is now on appeal to the Vermont Supreme Court. For more information on the case, see the Water Resources Boards’ decision at <http://www.state.vt.us/wtrboard/decisions/2004/wq-03-15-fco.pdf>.

Exhibit 3-5:

**GEORGIA COUNTIES EXPERIENCING RAPID GROWTH
AND STREAMS IMPAIRED BY SEDIMENT**



States and Other Federal Agencies Provide Alternative Compliance Monitoring Approaches

Some States interviewed link construction storm water requirements to existing local building requirements, and thus leverage existing requirements as a means to improve storm water permit coverage. These States collaborate with local agencies, who elect to make the process of getting a storm water permit a standard part of the building process. For example, as mentioned earlier, Georgia and Kansas work with local governments to require that builders submit an NOI and/or receive a storm water permit before the local building authority will issue a building permit. This regulatory lever to stop work until storm water permits are in place can act as a powerful incentive for builders to come into compliance with storm water permitting requirements. One builder reports that in their county, building inspectors cover storm water issues, and if they find dirt in the street they will shut down the site. This builder reports that this direct approach is appreciated, because it keeps them focused on the requirements. While EPA and States cannot require local governments to incorporate storm water requirements into the process of obtaining building permits, it is possible to provide storm water information to local building inspectors and encourage them to inform builders about storm water requirements. Our interviews suggest that builders would appreciate a local one-stop shop for information related to all permitting requirements. For example, AGC recommends that environmental regulators distribute fact sheets to local building authorities that issue building permits to educate builders about the storm water program from the earliest stages of the construction project. In addition to general fact sheets, it would be helpful for States and EPA to make storm water checklists, a more detailed description of the storm water program, and a self-audit sheet available through local building inspector offices.

In addition, EPA and States may build on pre-existing soil and erosion-control programs to help implement the Phase I construction storm water program. The 2000 Report to Congress on the Phase I Storm Water Regulations provides an example of this type of leverage in North Carolina. That State's Sedimentation Control Program (SCP) has been in place since 1973. The SCP requires effective sediment erosion control at construction sites of one acre or more to prevent inhibition of aquatic plant growth, disruption of fish nests, and the introduction of toxins into the water. Within the NC Department of Environment and Natural Resources, the Division of Land Resources (DLR) is responsible for administering the SCP and the Division of Water Quality (DWQ) is responsible for administering the Phase I storm water program. The two divisions recently joined forces to stop poorly managed construction activities in a portion of Brunswick County, where ditching activities had resulted in the improper drainage of nearly 1,500 acres of wetlands and off-site sedimentation resulting in water quality impairments to Beaverdam Creek. A settlement included restoration of the drained wetlands and \$213,000 in fines and enforcement costs. By combining efforts under the SCP and the Phase I construction storm water program, North Carolina has achieved water quality benefits.⁴⁸

⁴⁸ EPA, Office of Water, Report to Congress on the Phase I Storm Water Regulations, February 2000, pages 4-6.

Summary

Overall, Regions and States have increased attention on compliance monitoring, and particularly on-site compliance inspections, for construction storm water since 2000, although little data on compliance monitoring is available for the early years of the program. Comprehensive construction storm water inspection data for States and Regions is not available through ICIS, nor is measurement data for analyzing whether inspections are changing the behavior of the regulated community. States and Regions primarily rely on a sector approach or referrals from states and citizens to target inspections, and there are opportunities to refine inspection targeting approaches to focus on additional risk-based criteria (e.g., areas with impaired watershed and rapid construction growth). Additional suggestions for improving compliance monitoring for construction storm water include offering more training to inspectors, providing additional contractor resources for conducting inspections, and integrating storm water requirements into the process of obtaining local building permits.

ENFORCEMENT

OECA's focus on enforcement, rather than outreach and assistance, to assure compliance among Phase I construction storm water operators dates from the 2000 Storm Water Enforcement Strategy. The 2000 Strategy emphasizes the need to address facilities that have not filed for a discharge permit (i.e., non-filers), respond promptly to citizen complaints, and focus Regional efforts on non-authorized States. At the same time, OECA's FY 2000/2001 Memorandum of Agreement Guidance encourages Regions and States to strategically target enforcement activities for storm water dischargers, due to the large number of regulated sites. However, it also emphasizes the need to address the other wet-weather priorities of CSOs and SSOs before turning to major storm water initiatives.

Regions report that allocating scarce enforcement resources among priority areas requires time to implement and coordinate. Case investigation, development, and settlement generally require several years to complete. Our 2003-2004 data for increased on-site inspections (see Exhibit 3-3) and formal enforcement actions (see Exhibit 3-6) for Phase I construction storm water activities appear to support the time needed for Regions to implement strategies issued by Headquarters in 2000. Formal enforcement actions for Phase I construction storm water activities increased from 12 percent of all NPDES enforcement actions in 2000 to 29 percent in 2003; and from 22 percent of all storm water enforcement actions in 2000 to 68 percent in 2003. The 2003 data also include the results of five Regions reporting on the use of Expedited Settlement Offers as a new enforcement tool. These percentage increases represent a shift in enforcement resources and a focus on bringing Phase I construction sites into compliance with

storm water requirements. The latest data available suggests that there were 443 construction storm water enforcement cases for nine Regions reporting in 2004, representing 82 percent of total storm water enforcement actions (an increase from 2003.)⁴⁹

The 2003 Storm Water Enforcement Strategy reinforces the 2000 Strategy and requires Regions to develop and implement watershed- and/or sector-based storm water enforcement strategies by August 2004. Although only one Region so far has submitted its Regional strategy, many of the Regions appear to be implementing portions of the strategy in the absence of a formal submittal. Several Regions are targeting efforts toward large developers, many are responding to State and citizen complaints, and one Region is taking a watershed-based approach.

Within this section, we present our enforcement findings regarding the increased awareness of storm water requirements created by the big developer cases, the nature of non-compliance, the need for greater certainty in construction storm water requirements, and the need for priority-specific enforcement data systems to track progress. We also consider a key performance measure for the storm water program related to enforcement, namely, the number of regulated industry entities subject to enforcement and the nature of non-compliance.

Strong Enforcement Presence Increases Awareness of Storm Water Requirements

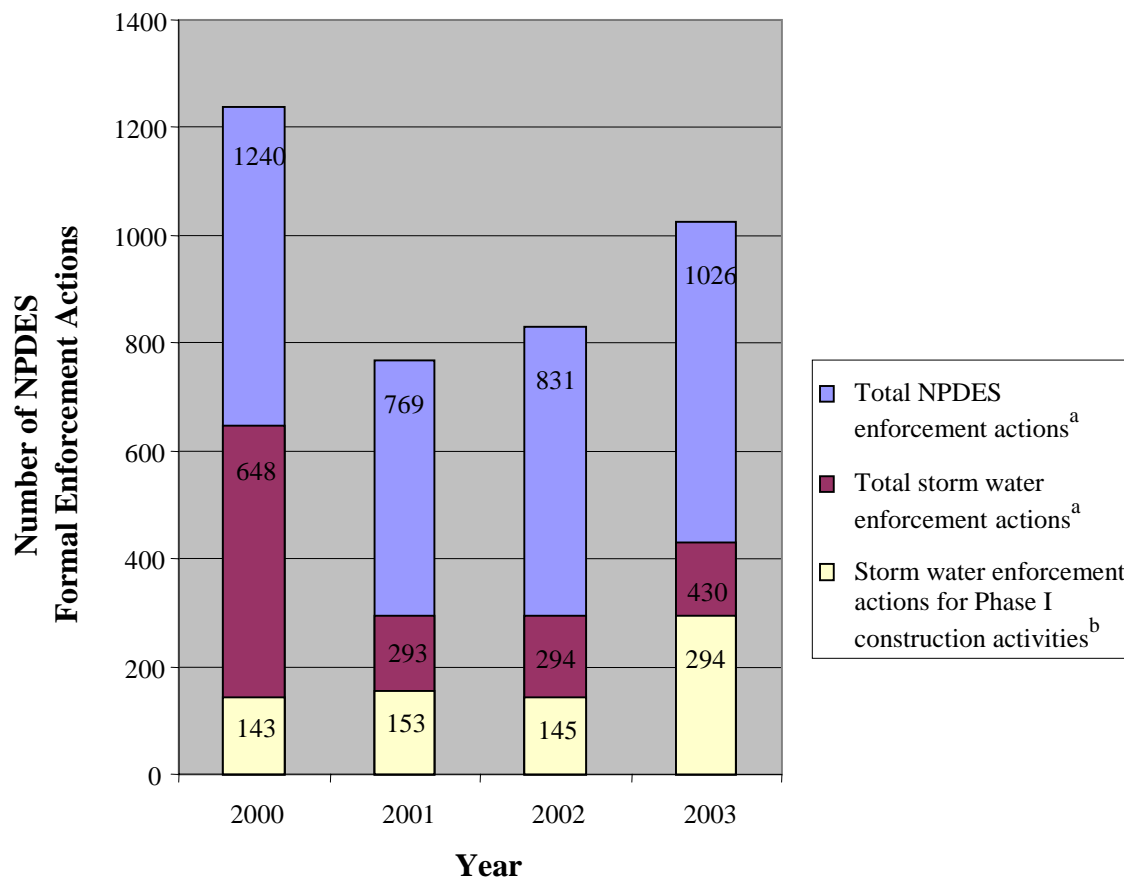
OECA initiated a series of high-profile nationwide enforcement cases against large developers. Using contractor support to identify the largest developers in the United States and conduct inspections, OECA triaged the sites with the most serious violations. These ongoing efforts have resulted in several well-publicized settlements that combine penalties for Clean Water Act violations, corporate commitments to actively manage compliance with storm water requirements through training and daily inspections, and the mitigation of environmental damages by conducting supplemental environmental projects such as purchasing and protecting wetlands, riparian habitat, and vernal pools. The majority of Regions and States report a heightened awareness among construction operators of storm water requirements following publication of these enforcement cases; and an increase in the requests for training and attendance by Federal and State regulators at trade association meetings. Georgia also decided to focus on large developers as a result of OECA's enforcement strategy. NGOs interviewed also highlight the importance of enforcement as the most important means of reaching compliance with construction storm water regulations. Representatives from industry generally counter that most in the industry want to comply with the law, and that emphasizing enforcement for the majority of builders who are trying to understand and comply with the requirements only breeds resentment.

⁴⁹ Source: Unpublished data provided by OECA on December 14, 2004. As a point of comparison, the total number of NPDES enforcement cases in 2004 include the following: 678 administrative compliance orders, 277 administrative penalty order complaints, 288 final administrative penalty orders, 33 civil judicial referrals, and 19 civil judicial conclusions; or 310 NPDES enforcement action case initiations and 985 NPDES enforcement case conclusions.

Exhibit 3-6

EPA STORM WATER FORMAL ENFORCEMENT ACTIONS

(as a Number of Total NPDES Enforcement Actions)



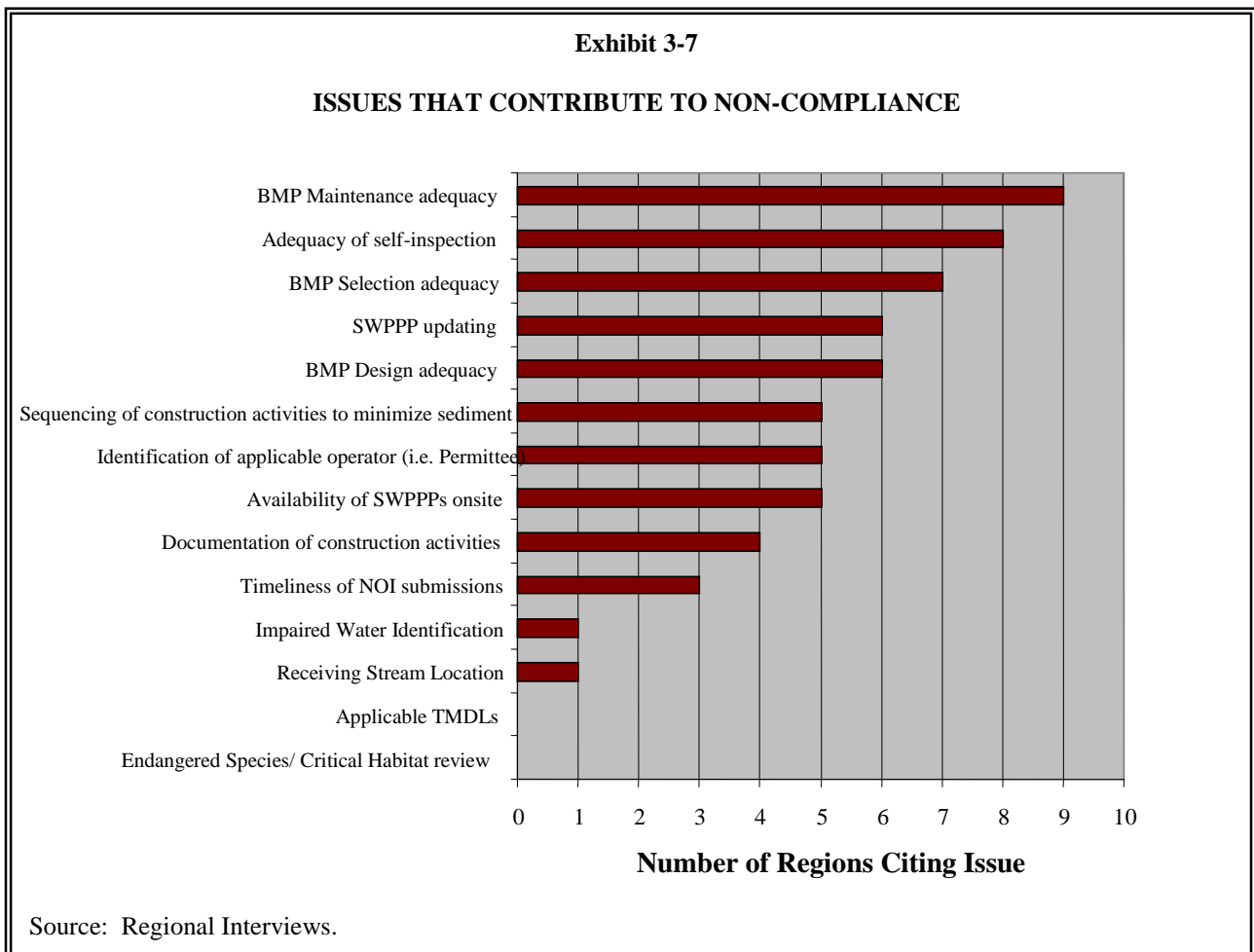
Sources: Office of Inspector General (OIG) Report No. 2005-5-00001 "Congressional Request Regarding EPA Clean Water Enforcement Actions, October 18, 2004" and contractor interviews with EPA Regions

a. Source: US EPA OIG, 2004. Data for 2004 were not available when the OIG report was published. Enforcement actions include Civil Judicial Referrals, Civil Judicial Settlements, Administrative Compliance Orders, Administrative Penalty Complaints, and Final Administrative Penalty Orders.

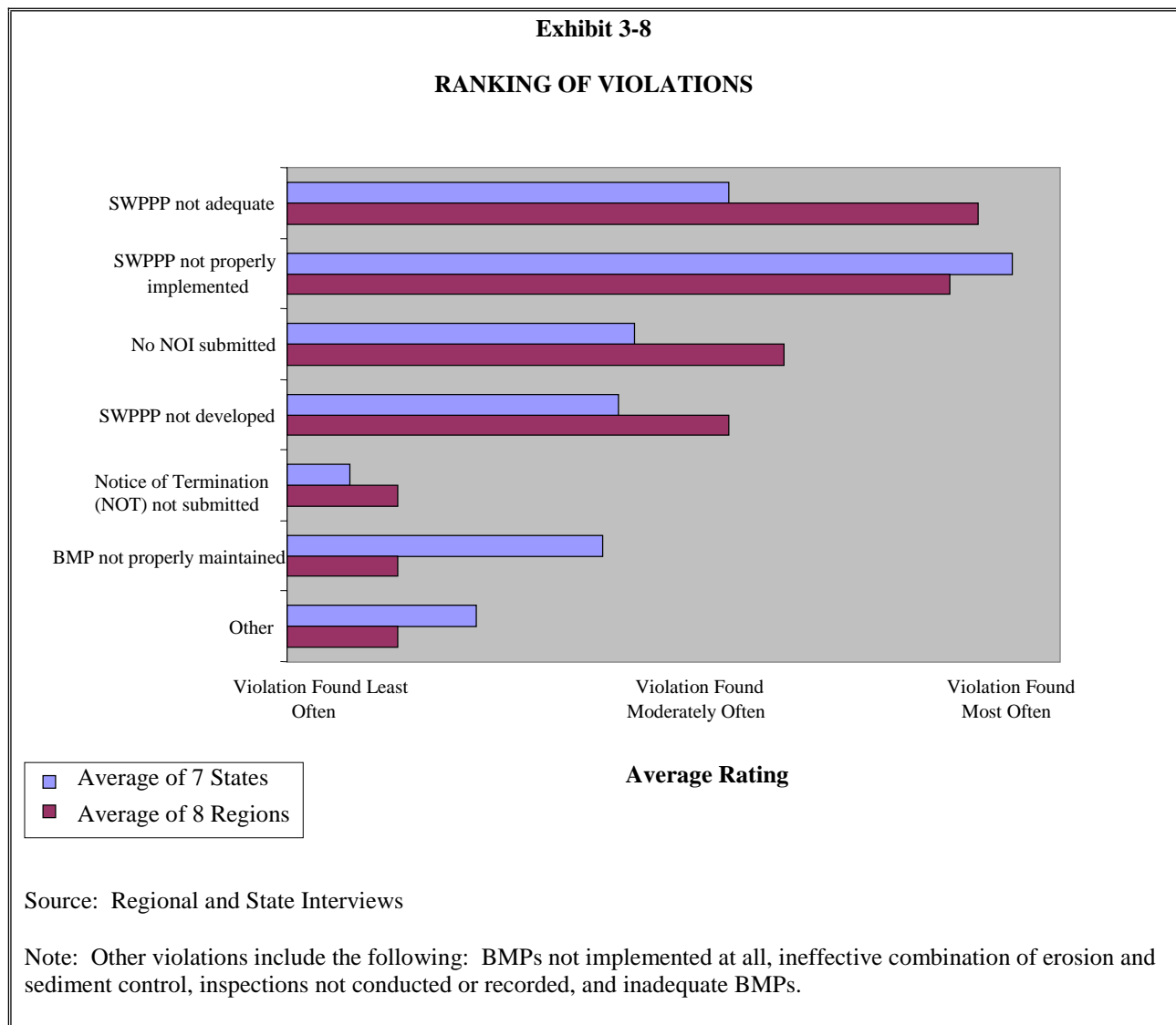
b. Source: Contractor interviews with EPA Regions. Enforcement actions include: Civil Judicial Referrals, Administrative Orders, Administrative Penalty Orders, and Expedited Settlement Orders (ESOs). We rely on Question 62 in the Regional interview protocol (Attachment A) to determine construction storm water actions for all Regions except Regions 6 and 9. For Region 6, we rely on their identification of construction cases from a list of storm water cases provided by Headquarters since Region 6 included State enforcement actions in their response to Question 62. Region 9 did not have readily available enforcement actions for Phase I construction activities. Other data caveats include: Region 10 reports formal enforcement actions, but does not categorize them by type of action; five Regions do not report data on ESOs; and some Regions may have had difficulty distinguishing between enforcement activities for Phase I and Phase II construction activities.

Nature of Non-Compliance

Analyzing the nature of non-compliance and the type of violation most commonly found by inspectors can provide insights into the needs of the regulated sector. Regions report that the inadequacy of BMP maintenance (9 Regions), BMP selection (7 Regions), and BMP design (6 Regions) are important issues that contribute to non-compliance among the construction industry (Exhibit 3-7). Five States (AL, CA, GA, KS, MD, and NV) also cite the inadequacy of BMP maintenance. These BMP inadequacies together with a failure of many operators to self-inspect (8 Regions) and update SWPPPs (6 Regions) are the issues cited by more than a majority of Regions as contributing to non-compliance. By contrast, no Regions report that TMDL identification or endangered species/critical habitat reviews contribute to non-compliance, and only one Region notes a problem with the sector identifying impaired waters or locating the receiving stream.

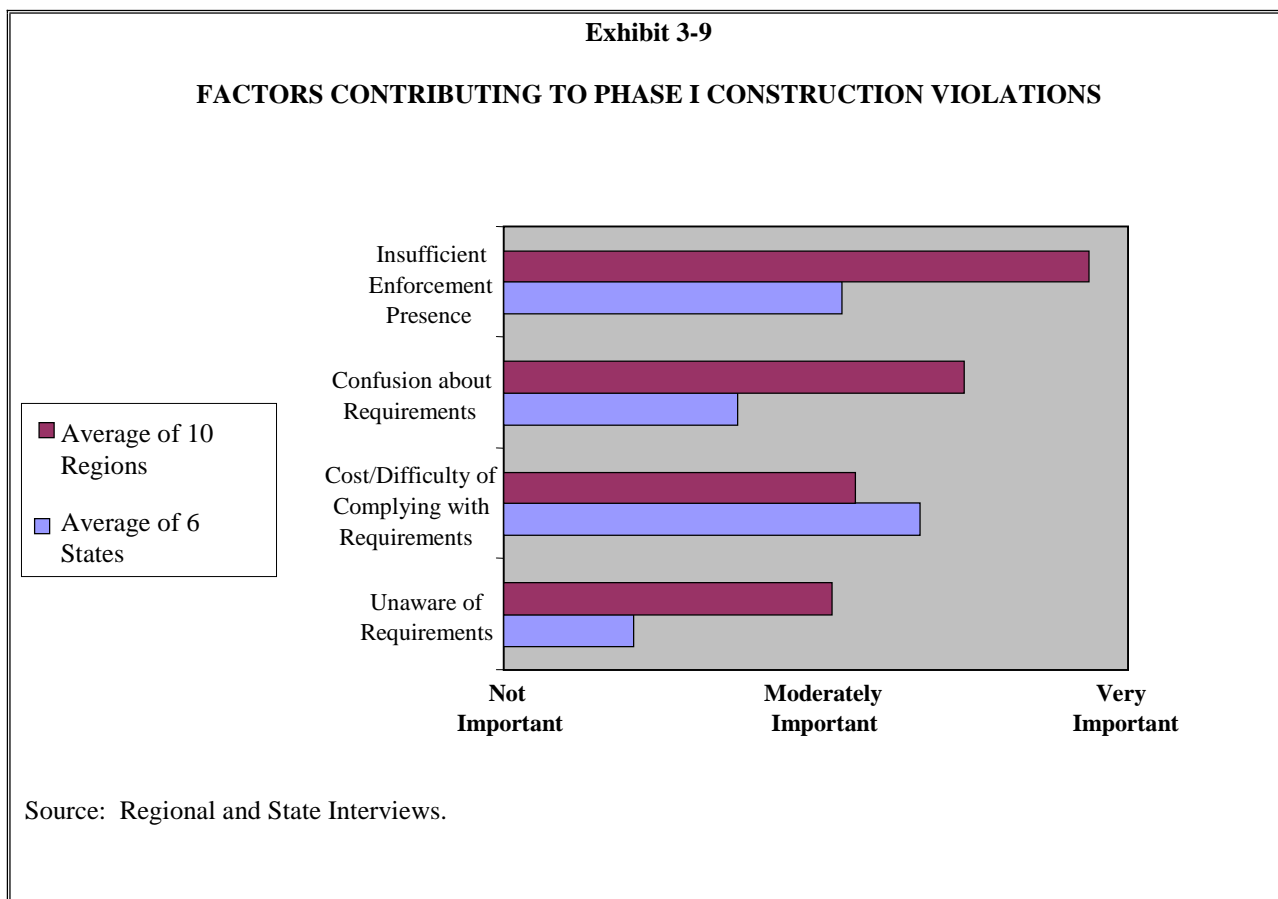


In addition to identifying issues that contribute to non-compliance, we asked Regions and States to rank the frequency of violations found in the course of conducting enforcement actions. Exhibit 3-8 presents Regional and State interview responses. Regional and State (CA, GA, KS, and MD) inspectors rank the improper implementation of SWPPPs as one of the most frequent violations. Four States (CA, GA, KS, and MD) found improper SWPPP implementation to be the most common violation and two States (AL and NV) found it to be the second most common storm water violation. On account of the averaging of State responses, it appears that States rank the improper maintenance of BMPs as a violation found moderately often despite Alabama and Georgia ranking this violation as the most frequent. Data systems that track violations would provide greater certainty regarding the nature of non-compliance.



Need for Greater Certainty in Construction Storm Water Requirements

Industry, NGOs, and Regions all point to confusion about storm water requirements as a common factor contributing to violations. Exhibit 3-9 below shows that Regions find this is the second-most common cause of storm water violations. Respondents particularly highlight the lack of specificity, uniform standards, and guidance regarding BMPs as challenges to construction operators in achieving compliance. For example, one builder says that the existing storm water regulations leave too much room for interpretation, which results in inconsistencies between inspectors. NGOs suggest that EPA establish numeric baseline values of storm water discharges from construction sites, and Public Employees for Environmental Responsibility (PEER) particularly urges EPA to enact effluent limits rather than BMPs to clearly define what levels of discharge are acceptable. Region 9 also supports promulgation of effluent limits, since the Region anticipates they would meet industry demands for more specificity in the requirements.



In addition to clarification on storm water standards, industry respondents highlight their confusion about who is responsible for meeting storm water requirements at the construction site. Trade associations and builders report that the definition of operator is not clear, especially when one individual or company can fulfill multiple roles, or where multiple entities are working together on a construction site. Moreover, not all States have used EPA's definition of operator, but EPA uses its own definition of operator when monitoring compliance. This discrepancy

means that operators may be cited for a violation by EPA when they thought the State permit required that owners be permitted instead. Some respondents suggest that owners should be the responsible party, since they have the power in the market to compel all of the contractors working for them to comply with storm water requirements.

Priority-Specific Enforcement Data Systems Needed to Track Progress

While EPA Headquarters has placed an increasing emphasis on obtaining consistent, reliable information about the extent of enforcement actions and enforcement trends overall, data available at a national level are often not detailed enough to provide specific information on the Phase I Construction Storm Water program. Currently, the primary system used to track enforcement data at the Federal level is ICIS. In addition, many States and Regions have their own independent data tracking systems, as discussed in the next section.

ICIS represents a significant modernization from EPA's "legacy" data systems (such as the Permit Compliance System, or PCS). When complete, ICIS will integrate data located in more than a dozen separate data systems. ICIS is currently designed to integrate information from compliance monitoring, compliance assistance, and enforcement programs. In 2006, ICIS will be expanded to include State and Federal NPDES permitting, State NPDES enforcement data, and later will be expanded for new programs and permit applications.⁵⁰

Interviews with staff in OECA's Enforcement Targeting & Data Division conclude that the ICIS system provides data broken out to the level of wet-weather issues, but not at a sufficient level of detail needed to identify storm water cases consistently. In 2003, storm water was listed as a MOA priority area that Regions could indicate when recording enforcement cases. However, the data were not system required and the data field is poorly populated, so it may significantly under-represent the number of storm water enforcement cases. In 2004, it was possible to designate NPDES cases as related to construction, but the data have not been tracked over time, thus precluding efforts to conduct a trend analysis.

Staff in the Enforcement Targeting & Data Division expressed general reservations about the comprehensiveness, consistency, and reliability of ICIS data, specifically at the level of detail needed to track storm water cases. Starting in fiscal year 2003, EPA Headquarters began requiring Regions to certify the data they enter into ICIS. In the future, efforts to collect data on storm water enforcement cases may improve. Beginning in Fiscal Year 2004, OECA created tables that compare Regional national priority enforcement data. However these tables do not specifically identify storm water discharges from construction activities.

⁵⁰ See *Timeline of ICIS*, <http://www.epa.gov/compliance/planning/data/modernization/timeline.html>.

OECA's use of the Case Conclusion Data Sheet (CCDS) tool is helping to improve the data quality in ICIS. The CCDS has been in use since 1995, and beginning in 2000/2001, EPA Headquarters promoted more consistent methodologies for reporting data by providing the CCDS Training Booklet. Headquarters also traveled to each Region to discuss and review the new environmental benefit methodologies. The CCDS Training Booklet describes calculations for reduction of stormwater at concentrated animal feeding operations (CAFOs). In 2004/2005, a revised CCDS Training Booklet was released to Headquarters and Regional staff. This document covers impacts from stormwater discharges from construction activities. In addition, an Excel spreadsheet model (like an expert system) that uses standard equations to determine soil loss and soil loss reduction as a result of the implementation of stormwater best management practices was made available to staff through EPA's intranet. Regional staff were not required to use the system to report soil loss and soil loss reduction until 2004.

Summary

According to data reported by Regions, the number of construction storm water cases has increased since 2000, with the greatest increase observed in 2003. In addition, in 2003, construction storm water cases made up a greater percentage of total storm water enforcement cases and all NPDES enforcement actions than they did in 2000. These data suggest an overall increase in attention on enforcement for construction storm water over the course of the evaluation period, at least at the Regional level. Respondents report that the most common issue contributing to non-compliance is failure to adequately maintain BMPs. In response to a different interview question, respondents believe the most common violations found by Regions and States to be inadequate SWPPPs and a failure to properly implement the SWPPP. Regulators, industry, and environmental NGOs all express interest in improving the certainty and clarity of storm water requirements for the construction industry. Finally, in order to improve analysis of enforcement cases in the future to promote ongoing program improvement, additional detail needs to be tracked for storm water enforcement cases at the national level.

COLLABORATION AND DATA SHARING

The Phase I construction storm water program is delegated in many areas to authorized States. Regions implement the program in non-authorized States and also serve in an oversight role for authorized States. Therefore, in order to assess the effectiveness of the construction storm water program, it is important to evaluate OECA's role in fostering effective sharing of information and resources to leverage Regional and State resources. A key measure of the success of the storm water program is the number of Regions and States that report that they receive support from OECA in implementation of the construction storm water program. The discussion below summarizes our findings regarding collaboration and data sharing between EPA Headquarters and Regions. We also report on our findings about collaboration between Regions and States, and coordination between offices at EPA Headquarters.

Regions Value OECA's Leadership and Opportunities for Input on OECA's Construction Storm Water Program

Regions have mixed opinions about OECA support of their construction storm water programs. On the one hand, most Regions say that they receive support from OECA, and many Regions highly praise the coordination and leadership of the Storm Water Team Leader (Lauren Kabler). The types of support that generate the most positive responses from the Regions are the national enforcement cases, the storm water work group, and the enforcement tools (e.g., the penalty policy). On the other hand, a few Regions reported that OECA's role has at times been "intrusive" and has detracted from the Region's ongoing activities.

Regions particularly highlight the importance of EPA HQ leadership on the national cases. Most Regions note that OECA has played an active role on large-scale national cases. Several Regions indicate that their most important interactions with OECA on Phase I construction storm water involve support in the prosecution of the national enforcement cases. One Region comments that the national cases support Regions in conducting inspections in authorized states. Another Region offers that it is important for OECA to send the message at a national level that EPA Regions have an oversight role and should be involved in the storm water program, even in authorized states.

Workgroups are widely valued and seen as one of the most effective ways that EPA HQ coordinates with Regions. Most Regions note that the workgroup sessions are among the most important interactions they have with OECA, although one Region remarked that the number of workgroups should be limited in order not to drain Regional staff time.

Most Regions want the opportunity to collaborate with EPA HQ on policies, and they have a positive response when Regional initiatives are scaled up to the national level. Several Regions note that policies developed at the Regional level have influenced national policymaking for Phase I construction storm water. Region 8 points out that the national storm water Penalty Policy was the product of the Region's efforts to develop a methodology for penalty consistency for the Wal-Mart cases. Regions 4 and 6 point out that the 2000 Storm Water Compliance and Enforcement strategy was largely based on strategies developed in their respective Regions.

Regions and States Rely on Information and Support for the Storm Water Program from Diverse Sources

Regions and States rely on diverse sources of information and support in implementing the storm water program. In particular, Regions rely on OECA, the Office of Water, staff within the Region, and other EPA HQ offices. While the interview protocol did not specifically ask about sources of information outside EPA, some Regions volunteered that they use information from outside groups (such as the Center for Watershed Protection). States rely on Regions for training, technical support, and funding. States also rely on local regulators and MS4s to identify construction entities to target in inspections.

Information Sharing with and among States and Municipalities is Decentralized

Authorized States tend not to have direct relationships with OECA, but rather relate to EPA through the Regional staff. States relate to Regions through Performance Partnership Agreements and other planning mechanisms, periodic meetings, training, and joint inspection/enforcement efforts. Authorized States perceive that they operate independently from Regions in many respects. Some States comment that certain Regions request the States for help, rather than the reverse. Regions and States report that their relationships vary widely, from collaborative to antagonistic. Regions note that States need guidance and training in order to implement the storm water program in the way EPA intends.

Regions and States Seek Additional Avenues for Information Sharing and Access to Resources

Regions would like more technical support from EPA HQ. For example, Regions seek additional technical support from EPA HQ in evaluating BMPs, NOIs, and pollution prevention plans and updating storm water materials. Regions also look to EPA HQ for funding and contractor assistance for a variety of tasks including travel funds for compliance assistance and training; additional personnel to help answer phones and provide compliance assistance; and additional resources such as computers, badges, and uniforms.

States request more timely feedback, advance planning, and technical support from Regions. States also note that resource limitations negatively impact their storm water programs. States would like to receive more financial assistance from EPA, and would like to have better information on where and how to apply for grants from EPA.

Coordination between OECA and OW Could be Improved

Interviews with staff at EPA Headquarters suggest that there are opportunities for greater coordination between OECA and OW. For example, these offices may benefit by working together to formalize the annual workplans and coordinating in the annual “priority selection process.”

In addition, OW and OECA complement each other’s efforts in providing compliance assistance materials for the construction storm water program through mutual references and links on their websites. Both Offices also support distribution of compliance assistance materials developed at EPA headquarters, but there is some evidence of lack of coordination between the Offices. For example, the OW-developed brochure, “Does Your Construction Site Need a Stormwater Permit,” references only the OW storm water website, not NECAC or CICA. “Federal Environmental Requirements for Construction,” developed by OECA, provides links for CICA, ECCAT and NECAC, but not for the OW storm water site.

Findings on Data Sharing

Most Regions report data to EPA HQ through established databases and reports, e.g., ICIS and PCS. While many Regions take steps to verify the data they submit, the multiple data collection methods and frequent ad hoc requests for data from HQ leads to confusion. It is not

clear that there are consistent reporting approaches across Regions. Some Regions have their own data tracking systems, and in some cases data is entered into a Regional system rather than being submitted to EPA HQ. Most, but not all, States report regularly to EPA on construction storm water activities.

Summary

In general, there is regular communication between EPA Headquarters and Regions, and between Regions and States. Regions value OECA's leadership role in the national enforcement cases and in disseminating certain enforcement tools. OECA's efforts to elicit Regional involvement in the storm water program have been widely appreciated, and Regions praise the role of the Storm Water Team Leader. However, some Regions feel that OECA needs to improve on eliciting input from the Regions, or in providing needed resources, training, and other types of support. Authorized States generally perceive that they operate independently from the Regions, but the nature of the relationship between Regions and States varies widely. More consistent data tracking for construction storm water across Regions, and more centralized reporting for States, would help track progress on the construction storm water program.

OVERALL SUMMARY OF OECA'S PROGRESS IN STORM WATER PRIORITY AREA OF PHASE I CONSTRUCTION ACTIVITIES

The progress achieved by OECA in the storm water priority area of Phase I construction activities can be summarized in a variety of ways. Below, we first assess overall progress against the program logic model presented in Chapter 1. Next, we characterize progress relative to the performance measures defined in Exhibit 2-7.

Assessment Against the Logic Model

EPA Headquarters, and OECA in particular, is working to coordinate efforts across Federal, State, and local jurisdictions in order to promote compliance with the Phase I construction storm water requirements and prevent polluted runoff from reaching waterways. A key factor that affects the success is the extent to which EPA Headquarters relies on Regions and especially States to implement the Phase I construction program. The entities that are likely to have the most contact with the construction industry, the local building inspectors and those that issue building permits, are beyond EPA's jurisdiction. Therefore, the Agency must rely on States in order to coordinate with local regulations. Also, the effectiveness of the storm water program varies widely between Regions and States, depending on several factors, such as the extent to which these regulators have a history of working on storm water issues and the degree of coordination between Regions and authorized States.

Resources, Activities, and Outputs

OECA, in coordination with OW and other EPA offices, has leveraged staff time and expertise, available funding, and access to contractors in order to develop policies and strategies for the storm water program, provide "wholesale" compliance assistance and outreach to the construction industry, offer training to Regional and State inspectors, coordinate national

enforcement cases, develop and disseminate enforcement tools. OECA has built upon successful initiatives at the Regional and State level. For example, the penalty policy for construction storm water, which was initially developed by Region 8, was key in developing the storm water penalty policy implemented by OECA at the national level, and has been well received by other Regions.

Target Audience

The ultimate target audience for the construction storm water program is the individual developers, builders, and contractors who are responsible for following program requirements and whose actions will determine the extent of pollution from storm water runoff. However, as mentioned above, EPA Headquarters has few opportunities to interact directly with the construction industry, except through the national enforcement cases and meetings with trade groups such as NAHB. These cases are important in setting an example and in establishing expectations for the industry as a whole; however, Regions and States are responsible for conducting the majority of compliance monitoring and enforcement actions. With regard to compliance assistance, OECA and OW have developed compliance assistance materials based on the Federal Construction General Permit; however, the Regions and States report they most often distribute customized materials they developed for their own jurisdictions. At least some industry respondents suggest that they are more likely to rely on compliance assistance from consultants or others within the industry, as opposed to materials from EPA, yet at the same time industry is interested in receiving more compliance assistance from regulators (particularly site-specific assistance). Overall, it seems that the decentralized nature of the storm water program makes it difficult for EPA Headquarters to reach its ultimate target audience.

Short-Term/ Intermediate Outcomes

Respondents report an increasing awareness of the construction storm water requirements over the course of the evaluation period. A number of respondents attribute this increased awareness in part to the promulgation of the Phase II construction storm water requirements in 2003, which increased attention on the overall construction storm water program. In addition, increasing inspections and enforcement actions drive efforts to comply and an increased demand for compliance assistance.

Long-Term Behavioral and Environmental Outcomes

Given the relatively recent attention on the construction storm water program at Regional and State levels, it is difficult to assess the degree to which OECA's storm water enforcement and compliance program is leading to long term changes in behavior to prevent storm water pollution. Moreover, tools to quantify environmental outcomes from storm water cases have only recently been developed, and therefore baseline data is only now being established. Data provided by EPA Headquarters identifies reductions in pollution as a result of construction storm water enforcement cases in 2004 (Exhibit 3-10).

Exhibit 3-10	
Pollution Reduction as a Result of Construction Storm Water Enforcement Actions in 2004	
Type of Pollutant	Pounds Reduction as a Result of Enforcement Actions
Sediment	19,394,000
Total Suspended Solids (TSS)	28,656,034
Fuel Oil/Diesel Fuels	15,188
Total Dissolved Solids	64,479
Source: Unpublished data provided by OECA on December 14, 2004.	

Assessment Against Performance Measures

Exhibit 2-7 (Chapter 2) describes a series of performance measures against which we initially proposed to measure the progress of OECA's progress in the storm water priority area of Phase I construction activities. Exhibit 3-11 describes progress against these measures.

Exhibit 3-11			
PERFORMANCE MEASURES TO ASSESS EFFECTIVENESS OF OECA's STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I CONSTRUCTION ACTIVITIES			
Program Component	Performance Measure	Data Source	Progress Made
Levels of Compliance	Number of permitted construction sites compared to number of construction sites subject to Phase I construction storm water requirements.	Regional and State interviews; 1999 OW Phase II Economic Analysis; NAHB's Housing Economics Online; NOI permitting databases.	OECA and its Regional and State partners are making steady progress in raising awareness in the construction industry and bringing regulated sites into compliance, particularly in 2003 and 2004. Due to the number of Phase I regulated entities per year (estimated at 186,000 nationwide) and the constantly changing universe of permitted sites, data regarding levels of compliance are not readily available.
	Percentage of permitted universe in compliance with storm water requirements	Regional and State Interviews	Based on readily available data, it is not possible to determine the non-compliance rate for the entire construction industry or even for all permitted sites. The only quantitative indicator of compliance available is that 42 percent of on-site compliance inspections resulted in enforcement actions in 2003. Corresponding data from States suggest that the percentage of on-site compliance inspection resulting in enforcement actions ranges from less than one percent to 55 percent. These estimates may overestimate non-compliance rates among permitted sites, since inspectors tend to target sites that are thought likely to be in violation (e.g., based on citizen complaints). However, these estimates may underestimate non-compliance rates among non-permitted sites, since sites that have not filed an NOI may be even less likely to have developed a SWPPP or be appropriately implementing BMPs. Qualitatively, Regions and States report a perceived decrease in the number of un-permitted sites (or sites failing to submit an NOI), and a continuing concern that BMPs are not being properly maintained.

Exhibit 3-11

PERFORMANCE MEASURES TO ASSESS EFFECTIVENESS OF OECA's STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I CONSTRUCTION ACTIVITIES

Program Component	Performance Measure	Data Source	Progress Made
Key Strategies and Policies	Number of Regions reporting increase in effectiveness of implementation efforts as a result of key strategies and policies.	Regional interviews; strategy and policy documents.	The number of Regions and States reporting that OECA's strategies and policies helped in their storm water program implementation efforts varies depending on the particular strategy. The policies that the most Regions report as helpful are the ESO and the Supplemental Guidance on the CWA Penalty Policy. States were indirectly affected by OECA's strategies, and it is not clear the number of States that find these strategies and policies helpful.
Compliance Assistance	Number of representatives from Regions, States, and regulated community reporting use of compliance assistance materials developed by OECA/ OC.	Regional, State, and Industry, and NGO interviews.	Despite an abundance of written compliance assistance materials, Regions and States emphasize the importance of on-site, in-person assistance or State-specific training that includes a component in the field.
	Number of interviewees reporting that delivery mechanisms for compliance assistance materials serve the needs of the regulated industry.	Regional, State, and Industry interviews.	Regions, States, and Industry report that generic, web-based materials are less useful in a context where the construction industry interfaces with local building inspectors (i.e., municipal or county) and there may be established local storm water requirements (i.e., municipal, county, and State). Certain State programs (i.e., Alabama and Maryland) may provide models for delivery of storm water compliance assistance with adjustments to measure performance.
Compliance Monitoring	Number (and percentage) of regulated industry subject to compliance inspections.	Regional and State interviews; ICIS database; 2004 IG Report.	In 2003 Regions report a total of 994 were on-site compliance inspections, and five states report nearly 13,000 on-site compliance inspections. Overall, Regions and States have increased attention on compliance monitoring and on-site compliance inspections since 2000, although little data on compliance monitoring is available for the early years of the program. Regions welcome OECA's offer of contractor support to assist with inspections. There is not sufficient data available to determine the percentage of the regulated industry subject to compliance inspections.

Exhibit 3-11

PERFORMANCE MEASURES TO ASSESS EFFECTIVENESS OF OECA's STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I CONSTRUCTION ACTIVITIES

Program Component	Performance Measure	Data Source	Progress Made
Enforcement	Number (and percentage) of regulated industry subject to enforcement actions, by category of action (i.e., administrative order, administrative penalty order, civil referral, etc.).	Regional, State, Industry, and NGO interviews; ICIS database; 2004 IG Report.	Regions report 294 construction storm water enforcement cases in 2003, and Headquarters reports 443 cases for 9 Regions reporting in 2004. For 2003, the Regions report that 58 percent of their enforcement cases were Administrative Orders, 31 percent were ESOs, 10 percent were Administrative Penalty Orders, and less than one percent were Civil Judicial Referrals (note this data includes some cases from States for Region 6). There are not comparable data readily available for many of the States interviewed. There is also not sufficient quantitative information to determine the percentage of the regulated industry subject to enforcement cases. However, qualitatively, respondents report that industry is increasingly aware of enforcement efforts for construction storm water. Anecdotal evidence suggests a deterrent effect from inspections and enforcement actions, and respondents from Regions, States, and Industry report that inspections and enforcement raise awareness of the requirements and drive demand for compliance assistance.
	Nature of non-compliance.	Regional, State, Industry, and NGO interviews.	Regions and States report a perceived decrease in the number of unpermitted sites (or sites failing to submit an NOI), and a continuing concern that BMPs are not being properly maintained.
Collaborations: Sharing of Information and Resources	Number of Regions and States reporting support from OECA in implementation of the construction storm water program.	Regional and State interviews.	Regions report receiving support from OECA. The types of support Regions deem most helpful to date are the national enforcement cases and selected enforcement tools. Authorized states generally tend to see themselves as operating relatively independently, and do not generally have relationships directly with OECA at the Federal level.

OECA's construction storm water compliance and enforcement program seeks to coordinate efforts across Federal, State, and local jurisdictions to promote compliance with the Phase I requirements. OECA's challenge involves working with a variety of partners at different levels of government and the construction sector to improve storm water compliance. Generally, OECA adopts a "wholesale" approach to compliance assistance and focuses its enforcement efforts on nationwide cases that involve large corporations. This approach can be very effective in many sectors and OECA has demonstrated success in prosecuting the "big box" cases and developing innovative enforcement tools such as the Expedited Settlement Offer for use in the field. However, based on comments from those we interviewed, it appears that the construction industry subject to the Phase I storm water requirements includes many small businesses that are accustomed to interfacing with local regulators to obtain building permits, etc. This means that direct contact and local networks for delivering compliance assistance are more important for this sector.

IEc and Kerr offer recommendations intended to improve OECA's efforts in ensuring storm water compliance in the construction industry through increased collaboration with all levels of government and an adaptation of compliance strategies to meet the needs of this regulated sector. Below, we first discuss overarching recommendations and then offer recommendations grouped according to our six areas for evaluation.

OVERARCHING RECOMMENDATIONS

We present the following overarching recommendations that are applicable to several areas of the evaluation. For example, the need for more complete and reliable data systems to track information is critical to measuring OECA's progress in ensuring compliance. Second, OECA should consider developing realistic performance measures with Regions based on available resources and a multi-year strategy.

Recommendation 1: Develop Information Systems that Provide Reliable Data Regarding Construction Storm Water Compliance

Although OECA has made significant strides in bringing the ICIS system on line and developing quality control mechanisms to improve data reliability, much of the information is

collected at the level of the overall NPDES program and does not readily facilitate analysis at the priority-specific level. In addition, inspectors do not appear to be collecting and recording information from the Inspection Conclusion Data Sheets that would shed light on the inspections of Phase I facilities. Furthermore, while the PCS system is being updated, there is no SNC definition for storm water violations and apparently no fields that would permit analysis of this wet weather priority area. For every priority area selected for attention, OECA should consider adjusting existing data systems to track priority-specific efforts and progress.

Recommendation 2: Consider Developing Realistic Performance Measures with the Regions based on Available Resources and a Multi-Year Strategy

OECA has made a significant first step in issuing a performance-based strategy for the storm water national compliance and enforcement priority. In the future, OECA may want to consider working directly with Regions to develop a collaborative strategy that incorporates regional input from the outset and links intended outcomes to program inputs as illustrated in the program's logic model. Furthermore, such performance measures should be an essential part of each storm water compliance and enforcement strategy developed at the Headquarters and Regional levels, rather than being issued as an independent document.

LEVEL OF COMPLIANCE

Recommendation 3: Work with Local Regulators to Improve Data on the Number of Regulated Construction Sites

Local regulators keep records of the number of building permits issued, and in some jurisdictions, require evidence of a storm water permit from construction developers. OECA should consider working with local regulators in an effort to ascertain the universe of Phase I and Phase II sites. If EPA's 1999 estimates are accurate for the Phase I sites, a large portion of the construction industry may be without permit coverage and out of compliance with the storm water requirements.

Recommendation 4: Provide States with an Adaptable Electronic NOI Database System

Regions report favorably on the benefits of OW's electronic NOI database system to track storm water permittees. Some interviewed States expressed an interest in a comparable system, and we are aware of a number of States that are in the process of developing such a system. OECA may wish to consider working with OW to provide States with a platform for the electronic NOI database system that is adaptable to State needs and that may be used independently of EPA. Such a system has the potential to substantially increase the number of sites entering the system and becoming permitted.

KEY STRATEGIES AND POLICIES

Recommendation 5: Consider a Multi-Year Approach to Storm Water Strategies that Contains Realistic Measures of Performance

The evaluation findings suggest that considerable time is needed to fully implement the storm water strategies. This stems in part from the nature of the storm water program as a delegated program, since Regions need to internalize the strategies and then communicate them to States. In order to allow for this process to take place, EPA should anticipate how the strategies will be disseminated in stages, and allow time for the strategies to be implemented before a new strategy is issued with updated priorities.

Recommendation 6: Revise ESO Policy and Develop a Communication Strategy

We understand that revisions to the ESO policy are currently underway based on feedback from the pilot experience. Together with these revisions, OECA may wish to consider developing a communication strategy for this innovative enforcement tool. Both Regional and industry interviews suggest that a variety of parties hold diverse expectations regarding the application of the ESO policy. Such a communication strategy might explain the purpose of the tool, its anticipated application, its limitations, and include a schedule for periodic assessments to evaluate and report on its ongoing effectiveness. Of course, this requires having data systems that allow reporting of ESO actions independently of other enforcement actions.

Recommendation 7: Track Overall Progress through Use of National Water Quality Inventory Reports or other Monitoring Data about Watershed Impairments

The ultimate measure of success of OECA's storm water program is whether water bodies are becoming less polluted by sediment and other contaminants from construction sites. Tracking water quality trends, particularly in areas of rapid development, could provide a way for OECA to benchmark whether the combined efforts of EPA, States, and local governments are having their intended effect.

COMPLIANCE ASSISTANCE

Recommendation 8: Invest in In-Person Compliance Assistance Efforts with Contractors and Field Staff

For this particular industry sector, OECA may want to consider investing in compliance assistance approaches that have the potential to provide greater learning opportunities. Small business contractors are unlikely to have the time or inclination to review detailed technical guidance manuals on a web site. Classroom training that includes a field component or an educational video that demonstrates good and bad storm water BMPs is more likely to have an impact.

Recommendation 9: Develop Flexible Compliance Assistance Materials that are Easily Adaptable for State and Local Needs

OECA has developed a set of compliance assistance materials that are generic in nature and applicable at the Federal level. However, States and local governmental entities often have special permit conditions to protect impaired water bodies or address regional considerations. OECA may wish to consider working with States to develop flexible compliance assistance materials that can be easily adapted to local use.

Recommendation 10: Modify Delivery of Compliance Assistance Materials to Fit within Existing Local Permitting Networks Familiar to Construction Industry

The construction industry is accustomed to interfacing regularly with local building inspectors and planning offices. In some instances, local officials are already handing out storm water compliance assistance materials and requiring that construction operators provide evidence of a storm water permit. OECA has an opportunity to build on this model to expand its network for delivering compliance assistance materials to the regulated community through partnering efforts with local officials.

COMPLIANCE MONITORING

Recommendation 11: Provide Targeting Resources to Regions and States

Regions and States have storm water personnel with extensive field experience and local knowledge, but are limited in the resources that they can bring to bear on a priority-specific compliance concern. OECA may wish to work with the OW to support Regional and State targeting efforts. Such analyses may include identifying fast-growing areas of the country and their proximity to impaired, or pristine, waters.

Recommendation 12: Consider Alternative Compliance Monitoring Approach that Provides Greater Compliance Assistance

States such as Alabama and Maryland provide site-specific compliance assistance during the course of compliance monitoring. By contrast, OECA's 2003 nationwide policy precludes this practice and limits inspectors to providing standardized information only. While this approach may be generally appropriate in the majority of inspections, OECA may wish to consider development of a customized, on-site compliance assistance effort for those portions of the construction industry that represent small businesses. We believe greater flexibility in this area may lead to increased compliance and better communication with the regulated community.

ENFORCEMENT

Recommendation 13: Use Nature of Non-Compliance Events to Clarify Construction Storm Water Requirements

Analyzing the nature of non-compliance and the type of violation most commonly found by inspectors can provide insights into the needs of the regulated sector and areas in the requirements that deserve greater clarification. The inadequacy of BMP maintenance and continuing confusion over who constitutes an “operator” provide opportunities for additional education by OECA.

COLLABORATION AND DATA SHARING

Recommendation 14: Increase Participation by Regions and States in Setting Storm Water Priorities and Developing Multi-Year Strategies

OECA, Regions, and States are all partners in promoting compliance with the Phase I storm water requirements for the construction industry. OECA’s storm water team provides an excellent foundation for expanding communication channels to increase Regional and State participation. While there are always transaction costs associated with involving more parties, we anticipate that there will be returns in collaborative compliance efforts.

Attachment A

Interview Guide for EPA Regional Contacts

OECA STORMWATER COMPLIANCE AND ENFORCEMENT EVALUATION
Proposed Interview Guide for EPA Regional Contacts

Points to make in introduction:

- We are contractors for EPA HQ. We have been hired as independent evaluators to assess Office of Enforcement and Compliance Assurance's implementation of its storm water compliance and enforcement program for Phase I construction activities.
- During this interview we may ask you questions that you are unable to answer because you do not have the requested information readily available. Whenever that is the case, just let us know. We do not expect that a Regional staff person will conduct a file review to answer any question. Some of the information we are looking for may not be collected by your Region, but we are asking to make sure that we do not miss any information that is relevant to our evaluation. If you provide an estimate, please let us know.
- Please note that an evaluation is **not** an assessment or audit of Regional performance. We are trying to understand to what extent and how OECA's activities impact your work and the work of States.
- Our evaluation covers activities beginning in 2000 to the present. Phase I construction activities (> 5 acre sites) were selected because the Phase I requirements have been in place since 1992, whereas the Phase II requirements only became effective in March of 2003. Our 2000 starting year for analysis coincides with the "2000 Storm Water Enforcement Strategy Update."
- We are interviewing contacts in each EPA Region and in several States, as well as contacts at trade associations and environmental groups. We intend to convey to EPA HQ findings about aspects of OECA's program that are working well, as well as suggestions for how to improve the program. We will share with you the draft evaluation report for your feedback. OECA will send out the final report to all the regions.
- *[Note to the interviewer: In the introductory conversation, ask about the role of the individual(s) being interviewed.]*

Interview Guide:

In the first part of this interview, we would like to get a better understanding of your Region's overall priorities related to stormwater pollution since 2000 (including but not limited to construction activities):

Regarding Stormwater Issues Generally:

1. How would you describe your Region's overall strategy for addressing stormwater issues?
2. Has this strategy changed since 2000? If so, how?
3. We have been given some information on total FTE allocations for stormwater activities (*Information for each Region will be inserted in table below*).
 - a) Could you confirm whether or not this information is correct?

<i>FTE Allocation for Stormwater</i>				
<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>

- b) Are you able to separate out how those FTEs are spread across different activities (compliance assistance, compliance monitoring, etc.)? If no, skip to the next question. If possible, please estimate how many FTEs were allocated to each type of activity.

<i>Type of Activity</i>	<i>FTE Allocation for Stormwater</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
Compliance Assistance					
Compliance Monitoring					
Enforcement					
State Coordination					
Policy/Tool Development					

4. Please rank the following sectors or areas in terms of your current priority for **outreach or compliance assistance** related to stormwater requirements, where 1 is the highest priority and 5 is the lowest priority:
 - ___ Municipal Separate Storm Sewer Systems (MS4s)
 - ___ Stormwater from Industrial Activities
 - ___ Large Construction Activities (> 5 acres)
 - ___ Small Construction Activities (< 5 acres)
 - ___ Watersheds of concern
 - ___ Other priorities determined by your Region (specify): _____
5. Have the priority areas for **outreach and compliance assistance** changed since 2000? If so, how?

6. Please rank the following sectors or areas in terms of your current priority for **compliance monitoring and enforcement** related to stormwater requirements, where 1 is the highest priority and 5 is the lowest priority:
- ___ Municipal Separate Storm Sewer Systems (MS4s)
 - ___ Stormwater from Industrial Activities
 - ___ Large Construction Activities (> 5 acres)
 - ___ Small Construction Activities (< 5 acres)
 - ___ Watersheds of concern
 - ___ Other priorities determined by your Region (specify): _____
7. Have the priority areas for **compliance monitoring and enforcement** changed since 2000? If so, how?
8. Did the **2000 Storm Water Compliance and Enforcement strategy** signed by Eric Schaeffer and issued by EPA Headquarters affect your strategy for stormwater? If so, describe how your activities changed as a result of the issuance of the strategy.
9. Did the **2003 Storm Water Compliance and Enforcement strategy** signed by Michael Stahl and Walker Smith and issued by EPA Headquarters affect your strategy for stormwater? If so, describe how your activities changed as a result of the issuance of the strategy.
10. Have you submitted your Region's response to the 2003 Strategy to OECA? If so, can you share a copy with us?
11. Did the 2003 Expedited Settlement Offer Program for Stormwater (Construction) signed by John Peter Suarez affect your strategy for stormwater? If so, describe how your activities changed as a result of the program.

In the rest of this interview, we would like to focus exclusively on your Region's activities related to Phase I stormwater discharges (*i.e.*, discharges from large (> 5 acre) construction sites) from 2000 to the present. All questions, unless otherwise stated, refer to activities since 2000. Please let us know if in responding to any of the questions that follow it is difficult to separate out your efforts related to construction activities as opposed to other stormwater sources, or to distinguish between Phase I and Phase II construction activities.

➤ **INFORMATION SHARING AND THE RELATIONSHIPS BETWEEN STATES, REGIONS AND HEADQUARTERS**

Note: headquarters includes program offices such as the Office of Water (OW) and core offices such as the Office of Compliance (OC) and the Office of Regulatory Enforcement (ORE) within the Office of Enforcement and Compliance Assurance (OECA).

Regional-HQ Interactions

12. What other offices or groups within EPA you have called on first when you needed support or input on Phase I stormwater/construction issues in your Region? For each of the following types of support, please identify what office or group you have called on first:

- Technical information: _____
- Policy and guidance: _____
- Staffing or funding: _____
- Enforcement support: _____

13. Are there other types of support you have needed in the past on Phase I stormwater/ construction issues? If so, what type of support did you need, and how did you try to get that support?

14. Are there other types of support that you currently need ?

15. How would you describe the role OECA has played in your Region since 2000 in your Phase I stormwater/construction activities?

16. What kinds of interactions do you currently have with OECA on issues related to Phase I stormwater/construction activities? Has the type of your interactions has changed since 2000, if yes, please describe.

- | | |
|---|---|
| <input type="checkbox"/> Regularly scheduled conference calls | <input type="checkbox"/> In person meetings |
| <input type="checkbox"/> Ad hoc phone calls | <input type="checkbox"/> Conferences |
| <input type="checkbox"/> Emails | <input type="checkbox"/> Training |
| | <input type="checkbox"/> Other (specify) |

17. Since 2000, in your opinion, what have been the most important interactions you have had with OECA regarding Phase I stormwater/construction? What issues did your interactions address? What types of interactions did you have? How often did you interact with OECA? Over what time period did your interactions occur?
18. Do you have any suggestions about how OECA could provide better support for your Region in your efforts to promote compliance with Phase I stormwater/construction requirements?

Regional-State Interactions

19. How would you describe your relationship with States in your Region on issues related to Phase I stormwater/construction activities? For each State, describe how you have worked together, and who has taken the lead on different activities.
20. What data have States shared with you regarding Phase I stormwater/construction activities in your Region?
21. Are you aware of any States in your Regions having independent data systems to track information related to Phase I stormwater/construction activities? If so, please describe which States have these systems and what you know about them.
22. Do you have any estimates of the number of construction entities subject to Phase I stormwater requirements in your Region each year? If so, what information do you have?
23. Have you worked with State or local agencies to identify entities subject to Phase I stormwater requirements?
24. How do you track Phase I stormwater **compliance assistance** in your Region? Do you verify the data's accuracy? If so, how? How do you store this data? Is any of this information shared with EPA HQ? If so, please describe what data are shared with EPA HQ, how data are shared, who receives the data, and how often data are shared.

25. Have you changed your compliance assistance activities based on the information received? If yes, how?
26. How do you track Phase I stormwater **monitoring and enforcement** activities in your Region? Do you verify the data's accuracy? If so, how? How do you store this data? Is any of this information shared with EPA HQ? If so, please describe what data are shared with EPA HQ, how data are shared, who receives the data, and how often data are shared.
27. Have you changed your monitoring and enforcement activities based on the information received?
28. Do you maintain information on the Regions' website related to the Phase I Stormwater program that is Region specific (*e.g.*, material that supplements stormwater materials already available through the OW and OECA websites)?
29. Do you link the regional website on stormwater to the HQ website? Why or why not? For what areas or topics do you provide a link to the HQ website? What EPA HQ website(s) do you link to? (List URL(s)).

➤ **Compliance Assistance and Outreach**

30. What **outreach methods** have you used since 2000 to help Phase I construction operators understand their stormwater discharge requirements? Answer to the best of your ability.

To help organize your thoughts, the following table is provided. The interviewer will fill in the table below describing the extent of outreach activities, the target audience, and the estimated percent of the target audience that has been contacted as a result of the outreach:

	<i>Extent of Outreach (See detailed questions below)</i>	<i>Target Audience(s)</i>	<i>Estimated numbers & % of Target Audience Reached</i>
Web site	<i>How long has web site been active?</i>		<i>Any data on number of web site hits?</i>
Mailings	<i>How many mailings have been sent, over what time period?</i>		
On-site visits (Compliance Assistance Visits)	<i>How many visits conducted over what time period?</i>		
Compliance assistance training targeted to State/local regulators	<i>How many training sessions conducted over what time period?</i>		
Compliance assistance training targeted to the construction sector	<i>How many training sessions conducted over what time period?</i>		
General stormwater/Phase I compliance assistance training (for all audiences)	<i>How many training sessions conducted over what time period?</i>		
Conferences sponsored by EPA or others targeted to State/local regulators	<i>How many conferences did Regional staff attend over what time period?</i>		

	<i>Extent of Outreach (See detailed questions below)</i>	<i>Target Audience(s)</i>	<i>Estimated numbers & % of Target Audience Reached</i>
Conferences sponsored by EPA or others targeted to the construction sector	<i>How many conferences did Regional staff attend over what time period?</i>		
General conferences sponsored by EPA or others that include some discussion of stormwater (for all audiences)	<i>How many conferences did Regional staff attend over what time period?</i>		
Meetings with the sector (e.g., trade associations and developers)	<i>How many meetings conducted over what time period?</i>	<i>Include in response which industry groups you met with.</i>	
Meetings with other regulators (e.g., States, local permitting authorities, etc.)	<i>How many meetings conducted over what time period?</i>		
Public Service Announcements (PSAs)	<i>How many PSAs aired over what time period, and via what media?</i>		
Journal Articles	<i>How many journal articles over what time period, and which journals?</i>		
Other (specify)			

31. Have you gotten any feedback on your outreach efforts? If so, what comments have you heard?

32. Have you conducted follow up to determine if your outreach efforts have improved compliance with Phase I requirements? If so, please describe these follow up efforts and what you have learned?

33. In your opinion, how would you rate the effectiveness of each type of delivery mechanism in terms of **increasing NOI submissions**? Rank 1 is most effective, meaning it resulted in a substantial increase in NOI submissions, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

	<i>Circle Effectiveness Rating Below</i>				
	<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
Web site	1	2	3	4	5
Mailings	1	2	3	4	5
On-site visits	1	2	3	4	5
Compliance assistance training	1	2	3	4	5
Conferences	1	2	3	4	5
Meetings with the sector	1	2	3	4	5
Meetings with other regulators (e.g., States, local permitting authorities, etc.)	1	2	3	4	5
Public Service Announcements	1	2	3	4	5
Journal Articles	1	2	3	4	5
Other (specify)	1	2	3	4	5

34. In your opinion, how would you rate the effectiveness of each type of delivery mechanism in terms of **improving SWPPP preparation**? Rank 1 is most effective, meaning it resulted in a significant improvement in the number and quality of SWPPPs prepared, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

	<i>Circle Effectiveness Rating Below</i>				
	<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
Web site	1	2	3	4	5
Mailings	1	2	3	4	5
On-site visits	1	2	3	4	5
Compliance assistance training	1	2	3	4	5
Conferences	1	2	3	4	5
Meetings with the sector	1	2	3	4	5
Meetings with other regulators (e.g., States, local permitting authorities, etc.)	1	2	3	4	5
Public Service Announcements	1	2	3	4	5
Journal Articles	1	2	3	4	5
Other (specify)	1	2	3	4	5

35. In your opinion, how would you rate the effectiveness of each type of delivery mechanism in terms of **improving SWPPP implementation**? Rank 1 is most effective, meaning it resulted in a significant improvement in the degree to which construction sites are taking appropriate actions to prevent pollution, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

	<i>Circle Effectiveness Rating Below</i>				
	<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
Web site	1	2	3	4	5
Mailings	1	2	3	4	5
On-site visits	1	2	3	4	5
Compliance assistance training	1	2	3	4	5
Conferences	1	2	3	4	5
Meetings with the sector	1	2	3	4	5
Meetings with other regulators (e.g., States, local permitting authorities, etc.)	1	2	3	4	5
Public Service Announcements	1	2	3	4	5
Journal Articles	1	2	3	4	5
Other (specify)	1	2	3	4	5

36. Have you distributed compliance assistance materials that specifically address any of the issues listed below? If so, please describe.

- Endangered Species/Critical Habitat review
- Receiving Stream Location
- Impaired Water Identification
- Applicable TMDLs
- Timeliness of NOI submissions
- Availability of SWPPPs onsite
- Identification of applicable operator (i.e., permittee)
- Sequencing of construction activities to minimize sediment
- BMP Selection adequacy
- BMP Design adequacy
- BMP Maintenance adequacy
- SWPPP Updating
- Documentation of construction activities
- Adequacy of self-inspection

37. Which of these issues have been dealt with most effectively by compliance assistance materials?

38. Are additional compliance assistance materials needed for any of the issues listed above? Which issues would you say are the highest priority for needing compliance assistance?

Ask what compliance assistance materials have been used by this Region since 2000 to help Phase I construction operators understand their stormwater discharge requirements.
For each type of material used, fill out a copy of this page and the next page.
If there are numerous materials used, fill out this form
for only those materials the Region deems most important.

39. For each compliance assistance material your Regional office has **used**, please answer the questions below:

- a) What is the compliance assistance material?
 - If available, request a copy of the document.
 - If not available, describe the scope of the compliance assistance material. (For example, is it just about stormwater, or is stormwater one of a variety of topics covered?)
- b) Who is the target audience?
- c) Who developed the material?
- d) How have you distributed the material?

<input type="checkbox"/> Web site	<input type="checkbox"/> Meeting with the sector
<input type="checkbox"/> Mailing	<input type="checkbox"/> PSAs
<input type="checkbox"/> On-site visit	<input type="checkbox"/> Journal Articles
<input type="checkbox"/> Group training	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Conference	
- e) During what time period did you distribute material (circle all appropriate years)?

2000
2001
2002
2003
2004
- f) Do you have any information on what percentage of the target audience received this compliance assistance material? If so, what data do you have?
- g) Do you have information on the number of target audience members that received this material? If so, what data do you have?
- h) Have you gotten any feedback on the compliance materials? If so, what comments have you heard?
- i) Do you conduct any follow up to determine the effectiveness of this material in improving compliance? If so, what have you found out?

- j) How would you rate the effectiveness of this compliance assistance material in terms of **increasing NOI submissions**? Rank 1 is most effective, meaning the outreach has resulted in a significant increase in NOI submissions, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- k) How would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP preparation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the number and quality of SWPPPs prepared, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- l) How would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP implementation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the degree to which construction sites are taking appropriate actions to prevent pollution, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- m) What ideas do you have for making this material more effective in helping improve compliance with Phase I stormwater requirements? Please include ideas involving any potential changes in distribution and use, as well as in design or content.

**Copy this page and the following page as needed so that there is a response sheet for each compliance assistance material covered.
Do not include this question in advance copy sent to Regions.**

40. If the following compliance assistance materials were not mentioned in the response to the previous question, prompt the interviewee by asking the questions below.

LIST OF COMPLIANCE ASSISTANCE MATERIALS

Compliance assistance materials prepared by OECA to mention:

- Construction Industry Compliance Assistance Center (www.cicacenter.org)
- National Environmental Compliance Assistance Clearinghouse (cfpub.epa.gov/clearinghouse)
- Federal Environmental Requirements for Construction
- List of Compliance Assistance Tools for Construction Sites
- OECA Enforcement Alert

Compliance assistance materials prepared by OW to mention:

- Stormwater Pollution Prevention Plans Guidance Manual (1992)
- OW stormwater month website (<http://cfpub1.epa.gov/npdes/stormwatermonth.cfm>)
- Does Your Construction Site Need a Stormwater Permit? A Construction Site Operator's Guide to EPA's Stormwater Permit Program
- After the Storm Brochure
- Stormwater and the Construction Industry Poster
- Door Hanger: "Stormwater Pollution Found in Your Area!"

- a) Have you seen this? _____ (fill in name of material from list) _____?

(show a copy of the material while asking the question, or if over the telephone, describe what the material looks like, who prepared it, its status, and where it can be found)

- ☐ Yes (*If yes, answer questions below*)
- ☐ No (*If no, go onto the next material*)

- b) Has your Regional office ever distributed this material?

- ☐ Yes (*If yes, answer questions i – x below*)
- ☐ No (*If no, answer questions xi below*)

- i) How have you distributed the material?

- | | |
|--|--|
| <input type="checkbox"/> Web site - <i>list website:</i> | <input type="checkbox"/> Conference |
| <input type="checkbox"/> Mailing | <input type="checkbox"/> Meeting with the sector |
| <input type="checkbox"/> On-site visit | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Group training | |

ii) During what time period did you distribute material (circle all appropriate years)?

2000 2001 2002 2003 2004

iii) Do you have any information on what percentage of the target audience received this compliance assistance material? If so, what data do you have?

iv) Do you have information on the number of target audience members that received this material? If so, what data do you have?

v) Have you gotten any feedback on the compliance materials from State or local agencies, industry or other groups? If so, what comments have you heard?

vi) Do you conduct any follow up to determine the effectiveness of this material in improving compliance? If so, what have you found out?

vii) In your opinion, how would you rate the effectiveness of this compliance assistance material in terms of **increasing NOI submissions** ? Rank 1 is most effective, meaning the outreach has resulted in a significant increase in NOI submissions, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

viii) In your opinion, how would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP preparation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the number and quality of SWPPPs prepared, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- ix) In your opinion, how would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP implementation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the degree to which construction sites are taking appropriate actions to prevent pollution, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- x) What suggestions do you have for making the material more effective? Please include ideas involving any potential changes in distribution and use, as well as in design or content.

- xi) If you did not distribute this material, what were your reasons for making that choice?
Circle all that apply below:

- ☐ This material was not suitable for this Region (*please describe why it was not suitable and what would have made it suitable*)
- ☐ This material was not needed; other materials were sufficient
- ☐ States were taking responsibility for compliance assistance in this area; no action by the Region was needed
- ☐ Other reasons (*please describe*)

41. Do you have ideas about how to improve **delivery** of compliance assistance and outreach to Phase I construction sites in your Region?
42. Are any States in your Region using approaches to delivery of compliance assistance or compliance assistance materials for Phase 1 stormwater construction that you believe would be useful for EPA for its own use or for broader dissemination to other States?

➤ **QUESTIONS RELATED TO COMPLIANCE MONITORING AND ENFORCEMENT:**

In the following section, we ask about compliance monitoring and enforcement actions in your Region related to Phase I stormwater requirements for construction activities. We realize that several (or all) States in your Region - (list States) - have authorized authority for NPDES. Our primary focus is on compliance monitoring and enforcement conducted by Regional staff, both independently and in conjunction with States. If in addition you have any information on State activities, that would be helpful as well to provide context. However, we do not expect that you will necessarily have information about compliance monitoring and enforcement activities at the State level.

43. How many large construction (or Phase I) Notices of Intent (NOIs) have been submitted each year in your Region since 2000? **SPECIFY WHICH STATES ARE INCLUDED IN THE TOTALS BELOW.**

<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>

44. Do you review NOIs in your Region? If so, what process has been used to review NOIs in your Region?

45. Since 2000, have any States in your Region required construction operators to submit SWPPPs with their NOIs? If so, is this information reviewed? If yes, who reviews it, and what follow up actions are taken if the SWPPP is not adequate?

46. How many large construction Notices of Termination (NOTs) have been submitted each year in your Region since 2000? **SPECIFY WHICH STATES ARE INCLUDED IN THE TOTALS BELOW.**

<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004(to date)</i>

47. Are there mechanisms that have been used in your Region to make sure that operators notify the permitting agency when construction is complete?

48. Do you have any data on **compliance monitoring activities** your Region has conducted since 2000 to assess whether Phase I construction operators are complying with their stormwater discharge requirements? If yes, see question a) below. If not, skip to next question.

- a) If yes, fill out the chart below to the best of your ability, with the number of each type of compliance monitoring action taken in each year for Phase I stormwater requirements. **Include activities conducted solely by Regional staff and activities conducted by Regional staff in conjunction with States.**

<i>Compliance Monitoring Activity</i>	<i>Number of Actions Taken in Each Year in the Region</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
Written information request (<i>e.g.</i> , a Section 308 request)					
On-site compliance inspection					
Off-site record review					
Reviewing citizen complaints					
Reviewing voluntary disclosures					
Other (specify)					

49. In June 2003 EPA Headquarters issued a policy on the “Role of the EPA Inspector in Providing Compliance Assistance During Inspections.” The policy provides for a range of approaches that inspectors could appropriately take in providing compliance assistance. Do inspectors from your Regional office typically provide any compliance assistance during the course of an on-site Phase 1 stormwater construction compliance inspection? If so, what kinds of assistance have been provided? (Describe examples.)

50. Do inspectors from your Regional office typically provide a closing conference (or exit interview) at the end of an on-site Phase 1 stormwater construction inspection? What information is typically conveyed during such a conference?

51. Are there circumstances where an exit interview would not be conducted following an on-site Phase 1 stormwater construction inspection? If so, please describe those circumstances and how often each of them occurs.

52. Are you aware of any data on the extent of compliance monitoring activities for Phase 1 stormwater construction activities conducted independently by States since 2000? If so, what information are you aware of? If available, please provide any quantitative or qualitative data on State compliance monitoring.

53. Have you shared the work of compliance monitoring for Phase I requirements with States in your Region? If so, how have you divided up the work? If applicable, distinguish between authorized and non-authorized States.

54. How has your Region targeted entities subject to stormwater construction requirements for information requests, inspections, investigations, or record reviews?

55. The following questions address types of violations found during inspections:

a) How would you rank the following types of violations in terms of what is most often found during inspections (where 1 is the violation most often found, and 5 is the violation found least often)

- ___ No NOI submitted
- ___ SWPPP not developed
- ___ SWPPP not adequate
- ___ SWPPP not properly implemented
- ___ Notice of Termination (NOT) not submitted
- ___ Other (specify)

b) Have the types of violations changed since 2000? If so, please describe how they have changed.

c) Do you have any data on the number of various types of violations found regarding Phase I stormwater construction requirements? If not, skip to the next question. If so, mark the number of each type of violation for each year in the table below: **Include violations identified by Regional staff independently and in conjunction with States.**

<i>Compliance Violation</i>	<i>Number of Violations Found in Each Year in the Region</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
No NOI submitted					
SWPPP not developed					
SWPPP not adequate					
SWPPP not properly implemented					
Notice of Termination (NOT) not submitted					
Other (specify)					

56. Of the following issues, what would you say are the most important issues that contribute to non-compliance in your Region?

- Endangered Species/Critical Habitat review
- Receiving Stream Location
- Impaired Water Identification
- Applicable TMDLs
- Timeliness of NOI submissions
- Availability of SWPPPs onsite
- Identification of applicable operator (i.e., permittee)
- Sequencing of construction activities to minimize sediment

- BMP Selection adequacy
- BMP Design adequacy
- BMP Maintenance adequacy
- SWPPP Updating
- Documentation of construction activities
- Adequacy of self-inspection

57. How do you determine the appropriate enforcement response to violations at the site?

58. Are you aware of any data on violations found by States since 2000? If so, what information are you aware of? If available, please provide any quantitative or qualitative data on Phase I/stormwater construction violations.

59. Based on your experience in compliance monitoring, how would you rate the following factors as contributors to Phase I construction violations (where 1 is very important, and 5 is not important). Please elaborate on specific aspects that are barriers to compliance.

	<i>Circle Importance Rating Below</i>				
	<i>Very Important</i>		<i>Moderately Important</i>		<i>Not Important</i>
Lack of awareness that there are requirements	1	2	3	4	5
Confusion about what the requirements are	1	2	3	4	5
Perceived cost or difficulty of complying with requirements	1	2	3	4	5
Insufficient enforcement presence – construction operators believe they won't be caught	1	2	3	4	5
Other factors (please describe)	1	2	3	4	5

60. What insights have you gained based on your compliance monitoring and inspections about how to improve compliance with Phase I requirements?

61. Have you ever seen evidence of actual discharges of sediment off site (*e.g.*, evidence of sediment in a stream) as a result of any violations you have found? If so, please describe. Have you observed this on many occasions?

62. What types of enforcement actions has your Regional office taken regarding Phase I stormwater construction requirements? Mark the number of each type of enforcement action for each year in the table below: **Include enforcement actions taken by Regional staff independently and in conjunction with States.** [Any information available in advance will be filled in, and Regions will be asked to confirm the data.]

<i>Enforcement Action</i>	<i>Number of Enforcement Actions Taken in Each Year in the Region</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
No action taken					
Informal action					
Notice of Violation (NOV)					
Administrative Penalty Order (APO)					
Administrative Order (AO)					
AO/APO					
Expedited Settlement Offer (ESO)					
Civil Judicial Referral					
Criminal Referral					

63. Are you aware of any data on enforcement actions taken by States since 2000? If so, what information are you aware of? If available, please provide any quantitative or qualitative data on Phase I/stormwater construction enforcement actions.
64. We recognize that the Performance-Based Strategy for Storm Water National Compliance and Enforcement Priority has just been developed, however, we are wondering if you have any information on the results of your Regional office's efforts to improve compliance with Phase I requirements for the construction industry. To the extent that data are readily available, please fill in the table below. **Include results of activities conducted by Regional staff independently and in conjunction with States.**

<i>Indicator of Results</i>	<i>Data available</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
Pounds of sediment reduced					
Other indicator used by Region (specify):					
Other indicator used by Region (specify):					

65. Do you have any readily available information on the number of citizen complaints filed?
66. What tools or combination of tools (including monitoring, enforcement, and compliance assistance tools) do you think are most helpful in improving compliance?

67. Have you used the Expedited Settlement Offer (ESO) Policy for Phase I violations in your Region? If so:

- a) How often has it been used?
- b) How did construction operators respond to the ESO?
- c) Have there been any problems in implementing the ESO?
- d) Do you think the ESO has been effective in getting construction sites into compliance?
- e) Have you followed up after issuing an ESO to make sure that construction operators were in compliance?

68. Have you used the Supplemental Guidance to the CWA Settlement Penalty Policy for Phase I violations in your Region? If so:

- a) How often has it been used?
- b) Did you have any difficulties in calculating the appropriate penalty?
- c) Do you have any suggestions for improving the guidance?

Attachment B

Interview Guide for State Contacts

OECA STORMWATER COMPLIANCE AND ENFORCEMENT EVALUATION

Interview Guide for State Contacts

Points to make in introduction:

- We are contractors for EPA HQ. We have been hired as independent evaluators to assess Office of Enforcement and Compliance Assurance's implementation of its storm water compliance and enforcement program for Phase I construction activities. We understand that your primary interface with EPA may be through your Regional office and do not anticipate that you have direct contact with OECA. Nonetheless, we believe that your responses to this interview guide will shed light on OECA's activities. In addition, we are hoping to learn from your experience about effective methods of improving compliance with stormwater requirements at construction sites, so that OECA can adopt and encourage effective techniques that have been developed by States. We appreciate your involvement and feedback.
- During this interview we may ask you questions that you are unable to answer because you do not have the requested information readily available. Whenever that is the case, just let us know. We do not expect that a State staff person will conduct a file review to answer any question. Some of the information we are looking for may not be collected by your State, but we are asking to make sure that we do not miss any information that is relevant to our evaluation.
- Please note that our purpose is **not** to evaluate State performance. We are trying to understand to what extent and how OECA's activities impact your work.
- Our evaluation covers activities beginning in 2000 to the present. Phase I construction activities (> 5 acre sites) were selected because the Phase I requirements have been in place since 1992, whereas the Phase II requirements only became effective in March of 2003. Our 2000 starting year for analysis coincides with the "2000 Storm Water Enforcement Strategy Update."
- We are interviewing contacts in several States, as well as contacts at trade associations and environmental groups. We intend to convey to EPA HQ findings about aspects of OECA's program that are working well, as well as suggestions for how to improve the program. We will share with you the draft evaluation report for your feedback. OECA will send out the final report to all the States.
- *[Note to the interviewer: In the introductory conversation, ask about the role of the individual(s) being interviewed.]*

In the first part of this interview, we would like to focus on your State's activities related to Phase I stormwater discharges (*i.e.*, discharges from large (> 5 acre) construction sites) from 2000 to the present. All questions, unless otherwise stated, refer to activities since 2000. Please let us know if in responding to any of the questions that follow it is difficult to separate out your efforts related to construction activities as opposed to other stormwater sources, or to distinguish between Phase I and Phase II construction activities.

> INFORMATION SHARING AND THE RELATIONSHIPS BETWEEN STATES AND REGIONS

State-EPA Interactions

1. What office or group at EPA have you called on first when you needed support or input on Phase I stormwater/construction issues in your State? For each of the following types of support, please identify what office or group you have called on first:

- Technical information: _____
- Policy and guidance: _____
- Staffing or funding: _____
- Enforcement support: _____

2. Are there other types of support you have needed in the past on Phase I stormwater/ construction issues? If so, what type of support did you need, and how did you try to get that support?

3. Are there other types of support that you currently need ?

4. How would you describe the role EPA has played in your State since 2000 in your Phase I stormwater/construction activities? Describe which office or group you have interacted with, how you have worked together, and who has taken the lead on different activities.

5. What kinds of interactions do you currently have with EPA on issues related to Phase I stormwater/construction activities? Has the type of your interactions changed since 2000? If yes, please describe.

- | | |
|---|--|
| <input type="checkbox"/> Regularly scheduled conference calls | <input type="checkbox"/> Conferences |
| <input type="checkbox"/> Ad hoc phone calls | <input type="checkbox"/> Training |
| <input type="checkbox"/> Emails | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> In person meetings | |

6. Since 2000, in your opinion, what have been the most important interactions you have had with the EPA regarding Phase I stormwater/construction? What issues did your interactions address? What types of interactions did you have? How often did you interact with EPA? Over what time period did your interactions occur?
7. Do you have any suggestions about how EPA could provide better support for your State in your efforts to promote compliance with Phase I stormwater/construction requirements?
8. What data have you shared regarding Phase I stormwater/construction activities with EPA?
9. Does your State have an independent data system to track information related to Phase I stormwater/construction activities? If so, please describe it.
10. Do you have any estimates of the number of construction entities subject to Phase I stormwater requirements in your State each year? If so, what information do you have?
11. Have you worked with EPA or local agencies to identify entities subject to Phase I stormwater requirements?
12. How do you track Phase I stormwater **compliance assistance** in your State? Do you verify the data's accuracy? If so, how? How do you store this data? Is any of this information shared with EPA? If so, please describe what data are shared with EPA, how data are shared, who receives the data, and how often data are shared.
13. Have you changed your compliance assistance activities based on the information received? If yes, how?
14. How do you track Phase I stormwater **monitoring and enforcement** activities in your State? Do you verify the data's accuracy? If so, how? How do you store this data? Is any of this information shared with EPA? If so, please describe what data are shared with EPA, how data are shared, who receives the data, and how often data are shared.

15. Have you changed your monitoring and enforcement activities based on the information received?
16. Do you maintain information on the State's website related to the Phase I Stormwater program that is State specific (*e.g.*, material that supplements stormwater materials already available through other websites)?
17. Do you link the State website on stormwater to any EPA website(s)? Why or why not? For what areas or topics do you provide a link to EPA website(s)? What EPA website(s) do you link to? (List URL(s)).

➤ **Compliance Assistance and Outreach**

18. What **outreach methods** have you used since 2000 to help Phase I construction operators understand their stormwater discharge requirements? Answer based on readily available information.

To help organize your thoughts, the following table is provided. The interviewer will fill in the table below describing the extent of outreach activities, the target audience, and the estimated percent of the target audience that has been contacted as a result of the outreach:

	<i>Extent of Outreach (See detailed questions below)</i>	<i>Target Audience(s)</i>	<i>Estimated numbers & % of Target Audience Reached</i>
Web site	<i>How long has web site been active?</i>		<i>Any data on number of web site hits?</i>
Mailings	<i>How many mailings have been sent, over what time period</i>		
On-site visits (Compliance Assistance Visits)	<i>How many visits conducted over what time period?</i>		
Compliance assistance training targeted to the construction sector	<i>How many training sessions conducted over what time period?</i>		
General stormwater/Phase I compliance assistance training (for all audiences)	<i>How many training sessions conducted over what time period?</i>		
Conferences sponsored by State or others targeted to the construction sector	<i>How many conferences did State staff attend over what time period?</i>		

	<i>Extent of Outreach (See detailed questions below)</i>	<i>Target Audience(s)</i>	<i>Estimated numbers & % of Target Audience Reached</i>
General conferences sponsored by State or others that include some discussion of stormwater (for all audiences)	<i>How many conferences did State staff attend over what time period?</i>		
Meetings with the sector (e.g., trade associations and developers)	<i>How many meetings conducted over what time period?</i>	<i>Include in response which industry groups you met with.</i>	
Meetings with other regulators (e.g., EPA, local permitting authorities, etc.)	<i>How many meetings conducted over what time period?</i>		
Public Service Announcements (PSAs)	<i>How many PSAs aired over what time period, and via what media?</i>		
Journal Articles	<i>How many journal articles over what time period, and which journals?</i>		
Other (specify)			

19. Have you gotten any feedback on your outreach efforts? If so, what comments have you heard?

20. Have you conducted follow up to determine if your outreach efforts have improved compliance with Phase I requirements? If so, please describe these follow up efforts and what you have learned.

21. In your opinion, how would you rate the effectiveness of each type of delivery mechanism in terms of **increasing NOI submissions**? Rank 1 is most effective, meaning it resulted in a substantial increase in NOI submissions, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

	<i>Circle Effectiveness Rating Below</i>				
	<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
Web site	1	2	3	4	5
Mailings	1	2	3	4	5
On-site visits	1	2	3	4	5
Compliance assistance training	1	2	3	4	5

Conferences	1	2	3	4	5
Meetings with the sector	1	2	3	4	5
Meetings with other regulators (e.g., EPA, local permitting authorities, etc.)	1	2	3	4	5
Public Service Announcements	1	2	3	4	5
Journal Articles	1	2	3	4	5
Other (specify)	1	2	3	4	5

22. In your opinion, how would you rate the effectiveness of each type of delivery mechanism in terms of **improving SWPPP preparation**? Rank 1 is most effective, meaning it resulted in a significant improvement in the number and quality of SWPPPs prepared, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

	<i>Circle Effectiveness Rating Below</i>				
	<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
Web site	1	2	3	4	5
Mailings	1	2	3	4	5
On-site visits	1	2	3	4	5
Compliance assistance training	1	2	3	4	5
Conferences	1	2	3	4	5
Meetings with the sector	1	2	3	4	5
Meetings with other regulators (e.g., EPA, local permitting authorities, etc.)	1	2	3	4	5
Public Service Announcements	1	2	3	4	5
Journal Articles	1	2	3	4	5
Other (specify)	1	2	3	4	5

23. In your opinion, how would you rate the effectiveness of each type of delivery mechanism in terms of **improving SWPPP implementation**? Rank 1 is most effective, meaning it resulted in a significant improvement in the degree to which construction sites are taking appropriate actions to prevent pollution, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

	<i>Circle Effectiveness Rating Below</i>				
	<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
Web site	1	2	3	4	5
Mailings	1	2	3	4	5
On-site visits	1	2	3	4	5
Compliance assistance training	1	2	3	4	5
Conferences	1	2	3	4	5
Meetings with the sector	1	2	3	4	5
Meetings with other regulators (e.g., EPA, local permitting authorities, etc.)	1	2	3	4	5

Public Service Announcements	1	2	3	4	5
Journal Articles	1	2	3	4	5
Other (specify)	1	2	3	4	5

24. Have you distributed compliance assistance materials that specifically address any of the issues listed below? If so, please describe.

- Endangered Species/Critical Habitat review
- Receiving Stream Location
- Impaired Water Identification
- Applicable TMDLs
- Timeliness of NOI submissions
- Availability of SWPPPs onsite
- Identification of applicable operator (i.e., permittee)
- Sequencing of construction activities to minimize sediment
- BMP Selection adequacy
- BMP Design adequacy
- BMP Maintenance adequacy
- SWPPP Updating
- Documentation of construction activities
- Adequacy of self-inspection

25. Which of these issues have been dealt with most effectively by compliance assistance materials?

26. Are additional compliance assistance materials needed for any of the issues listed above? Which issues would you say are the highest priority for needing compliance assistance?

27. Do you have ideas about how EPA could help support your delivery of compliance assistance and outreach to Phase I construction sites in your State?

28. Are you aware of any approaches to delivery of compliance assistance or compliance assistance materials for Phase I stormwater construction that you believe EPA should adopt or help disseminate to other States?

Ask what compliance assistance materials have been used by this State since 2000 to help Phase I construction operators understand their stormwater discharge requirements.
For each type of material used, fill out a copy of this page and the next page.
If there are numerous materials used, fill out this form
for only those materials the Region deems most important.

29. For each compliance assistance material your State office has **used**, please answer the questions below:

- a) What is the compliance assistance material?
- If available, request a copy of the document.
 - If not available, describe the scope of the compliance assistance material. (For example, is it just about stormwater, or is stormwater one of a variety of topics covered?)

b) Who is the target audience?

c) Who developed the material?

d) How have you distributed the material?

- | | |
|---|--|
| <input type="checkbox"/> Web site | <input type="checkbox"/> Meeting with the sector |
| <input type="checkbox"/> Mailing | <input type="checkbox"/> PSAs |
| <input type="checkbox"/> On-site visit | <input type="checkbox"/> Journal Articles |
| <input type="checkbox"/> Group training | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Conference | |

e) During what time period did you distribute material (circle all appropriate years)?

2000 2001 2002 2003 2004

f) Do you have any information on what percentage of the target audience received this compliance assistance material? If so, what data do you have?

g) Do you have information on the number of target audience members that received this material? If so, what data do you have?

h) Have you gotten any feedback on the compliance materials? If so, what comments have you heard?

i) Do you conduct any follow up to determine the effectiveness of this material in improving compliance? If so, what have you found out?

- j) How would you rate the effectiveness of this compliance assistance material in terms of **increasing NOI submissions**? Rank 1 is most effective, meaning the outreach has resulted in a significant increase in NOI submissions, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- k) How would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP preparation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the number and quality of SWPPPs prepared, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- l) How would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP implementation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the degree to which construction sites are taking appropriate actions to prevent pollution, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- m) What ideas do you have for making this material more effective in helping improve compliance with Phase I stormwater requirements? Please include ideas involving any potential changes in distribution and use, as well as in design or content.

Copy this page and the following page as needed so that there is a response sheet for each compliance assistance material covered. Do not include this question in advance copy sent to Regions.

30. If the following compliance assistance materials were not mentioned in the response to the previous question, prompt the interviewee by asking the questions below.

LIST OF COMPLIANCE ASSISTANCE MATERIALS

Compliance assistance materials prepared by OECA to mention:

- Construction Industry Compliance Assistance Center (www.cicacenter.org)
- National Environmental Compliance Assistance Clearinghouse (cfpub.epa.gov/clearinghouse)
- Federal Environmental Requirements for Construction
- List of Compliance Assistance Tools for Construction Sites
- OECA Enforcement Alert

Compliance assistance materials prepared by OW to mention:

- Stormwater Pollution Prevention Plans Guidance Manual (1992)
- OW stormwater month website (<http://cfpub1.epa.gov/npdes/stormwatermonth.cfm>)
- Does Your Construction Site Need a Stormwater Permit? A Construction Site Operator's Guide to EPA's Stormwater Permit Program
- After the Storm Brochure
- Stormwater and the Construction Industry Poster
- Door Hanger: "Stormwater Pollution Found in Your Area!"

- a) Have you seen this? _____ (fill in name of material from list) _____?

(show a copy of the material while asking the question, or if over the telephone, describe what the material looks like, who prepared it, its status, and where it can be found)

- ☐ Yes (*If yes, answer questions below*)
- ☐ No (*If no, go onto the next material*)

- b) Has your State office ever distributed this material?

- ☐ Yes (*If yes, answer questions i – x below*)
- ☐ No (*If no, answer questions xi below*)

- i) How have you distributed the material?

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> Web site - <i>list website:</i> | W | <input type="checkbox"/> Group training | G |
| <input type="checkbox"/> Mailing | M | <input type="checkbox"/> Conference | C |
| <input type="checkbox"/> On-site visit | O | <input type="checkbox"/> Meeting with the sector | M |



O

ther (specify)

- ii) During what time period did you distribute material (circle all appropriate years)?

2000 2001 2002 2003 2004

- iii) Do you have any information on what percentage of the target audience received this compliance assistance material? If so, what data do you have?

- iv) Do you have information on the number of target audience members that received this material? If so, what data do you have?

- v) Have you gotten any feedback on the compliance materials from local agencies, industry or other groups? If so, what comments have you heard?

- vi) Do you conduct any follow up to determine the effectiveness of this material in improving compliance? If so, what have you found out?

- vii) In your opinion, how would you rate the effectiveness of this compliance assistance material in terms of **increasing NOI submissions** ? Rank 1 is most effective, meaning the outreach has resulted in a significant increase in NOI submissions, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- viii) In your opinion, how would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP preparation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the number and quality of SWPPPs prepared, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- ix) In your opinion, how would you rate the effectiveness of this compliance assistance material in terms of **improving SWPPP implementation**? Rank 1 is most effective, meaning the outreach has resulted in a significant improvement in the degree to which construction sites are taking appropriate actions to prevent pollution, while rank 5 is least effective, meaning no noticeable change in behavior among regulated entities.

<i>Circle Effectiveness Rating Below</i>				
<i>Most Effective</i>		<i>Moderately Effective</i>		<i>Least Effective</i>
1	2	3	4	5

- x) What suggestions do you have for making the material more effective? Please include ideas involving any potential changes in distribution and use, as well as in design or content.
- xi) If you did not distribute this material, what were your reasons for making that choice? Circle all that apply below:
- ☐ This material was not suitable for this State (*please describe why it was not suitable and what would have made it suitable*)
 - ☐ This material was not needed; other materials were sufficient
 - ☐ EPA or local agencies were taking responsibility for compliance assistance in this area; no action by the State was needed
 - ☐ Other reasons (*please describe*)

QUESTIONS RELATED TO COMPLIANCE MONITORING AND ENFORCEMENT:

In the following section, we ask about compliance monitoring and enforcement actions in your State related to Phase I stormwater requirements for construction activities. If in addition you have any information on EPA activities, that would be helpful as well to provide context.

31. How many large construction (or Phase I) Notices of Intent (NOIs) have been submitted each year in your State since 2000?

2000	2001	2002	2003	2004 (to date)

32. Do you review NOIs in your State? If so, what process has been used to review NOIs in your State?

33. Since 2000, has your State required construction operators to submit SWPPPs with their NOIs? If so, is this information reviewed? If yes, who reviews it, and what follow up actions are taken if the SWPPP is not adequate?

34. How many large construction Notices of Termination (NOTs) have been submitted each year in your State since 2000?

2000	2001	2002	2003	2004(to date)

35. Are there mechanisms that have been used in your State to make sure that operators notify the permitting agency when construction is complete?

36. Do you have any data on **compliance monitoring activities** your State has conducted since 2000 to assess whether Phase I construction operators are complying with their stormwater discharge requirements? If yes, see question a) below. If not, skip to next question.

- a) If yes, fill out the chart below to the best of your ability, with the number of each type of compliance monitoring action taken in each year for Phase I stormwater requirements

Compliance Monitoring Activity	Number of Actions Taken in Each Year in the Region				
	2000	2001	2002	2003	2004 (to date)
Written information request (e.g., a Section 308 request)					
On-site compliance inspection					
Off-site record review					
Reviewing citizen complaints					
Reviewing voluntary disclosures					
Other (specify)					

37. Do inspectors from your State office typically provide any compliance assistance during the course of an on-site Phase 1 stormwater construction compliance inspection? If so, what kinds of assistance have been provided? (Describe examples.)
38. Do inspectors from your State office typically provide a closing conference (or exit interview) at the end of an on-site Phase 1 stormwater construction inspection? What information is typically conveyed during such a conference?
39. Are there circumstances where an exit interview would not be conducted following an on-site Phase 1 stormwater construction inspection? If so, please describe those circumstances and how often each of them occurs.
40. Have you shared the work of compliance monitoring for Phase I requirements with your EPA Region? If so, how have you divided up the work?
41. How has your State targeted entities subject to stormwater construction requirements for information requests, inspections, investigations, or record reviews?
42. The following questions address types of violations found during inspections:
- a) How would you rank the following types of violations in terms of what is most often found during inspections (where 1 is the violation most often found, and 5 is the violation found least often)
- ___ No NOI submitted
 - ___ SWPPP not developed
 - ___ SWPPP not adequate
 - ___ SWPPP not properly implemented
 - ___ Notice of Termination (NOT) not submitted
 - ___ Other (specify)
- b) Have the types of violations changed since 2000? If so, please describe how they have changed.
- c) Do you have any data on the number of various types of violations found regarding Phase I stormwater construction requirements? If not, skip to the next question. If so, mark the number of each type of violation for each year in the table below:

<i>Compliance Violation</i>	<i>Number of Violations Found in Each Year in your State</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
No NOI submitted					
SWPP not developed					
SWPPP not adequate					
SWPPP not properly implemented					
Notice of Termination (NOT) not submitted					

Other (specify)					
-----------------	--	--	--	--	--

43. Of the following issues, what would you say are the most important issues that contribute to non-compliance in your State?

- Endangered Species/Critical Habitat review
- Receiving Stream Location
- Impaired Water Identification
- Applicable TMDLs
- Timeliness of NOI submissions
- Availability of SWPPPs onsite
- Identification of applicable operator (i.e., permittee)
- Sequencing of construction activities to minimize sediment
- BMP Selection adequacy
- BMP Design adequacy
- BMP Maintenance adequacy
- SWPPP Updating
- Documentation of construction activities
- Adequacy of self-inspection

44. How do you determine the appropriate enforcement response to violations at the site?

45. Based on your experience in compliance monitoring, how would you rate the following factors as contributors to Phase I construction violations (where 1 is very important, and 5 is not important). Please elaborate on specific aspects that are barriers to compliance.

	<i>Circle Importance Rating Below</i>				
	<i>Very Important</i>		<i>Moderately Important</i>		<i>Not Important</i>
Lack of awareness that there are requirements	1	2	3	4	5
Confusion about what the requirements are	1	2	3	4	5
Perceived cost or difficulty of complying with requirements	1	2	3	4	5
Insufficient enforcement presence – construction operators believe they won't be caught	1	2	3	4	5
Other factors (please describe)	1	2	3	4	5

46. What insights have you gained based on your compliance monitoring and inspections about how to improve compliance with Phase I requirements?

47. Have you ever seen evidence of actual discharges of sediment off site (e.g., evidence of sediment in a stream) as a result of any violations you have found? If so, please describe. Have you observed this on many occasions?

48. What types of enforcement actions has your State office taken regarding Phase I stormwater construction requirements? Mark the number of each type of enforcement action for each year in the table below.

<i>Enforcement Action</i>	<i>Number of Enforcement Actions Taken in Each Year in the Region</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
No action taken					
Informal action					
Notice of Violation (NOV)					
Administrative Penalty Order (APO)					
Administrative Order (AO)					
AO/APO					
Expedited Settlement Offer (ESO)					
Civil Judicial Referral					
Criminal Referral					

49. Do you track any information on the results of your State's efforts to improve compliance with Phase I requirements for the construction industry? To the extent that data are readily available, please fill in the table below.

<i>Indicator of Results</i>	<i>Data available</i>				
	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004 (to date)</i>
Pounds of sediment reduced					
Other indicator used by State (specify):					
Other indicator used by State (specify):					

50. Do you have any readily available information on the number of citizen complaints filed?

51. What tools or combination of tools (including monitoring, enforcement, and compliance assistance tools) do you think are most helpful in improving compliance?

Attachment C

Interview Guide for Industry Trade Association Contacts

OECA STORMWATER COMPLIANCE AND ENFORCEMENT EVALUATION

Proposed Interview Guide for Industry Contacts

Introduction:

- We are contractors for EPA HQ. We have been hired as independent evaluators to assess Office of Enforcement and Compliance Assurance's implementation of its storm water compliance and enforcement program for Phase I construction activities.
- During this interview we may ask you questions that you are unable to answer because you do not have the requested information readily available. Whenever that is the case, just let us know.
- Our evaluation covers activities beginning in 2000 to the present. Phase I construction activities (> 5 acre sites) were selected because the Phase I requirements have been in place since 1992, whereas the Phase II requirements only became effective in March of 2003.

We are interviewing contacts in each EPA Region and in several States, as well as contacts at trade associations and environmental groups. We intend to convey to EPA HQ findings about aspects of OECA's program that are working well, as well as suggestions for how to improve the program. OECA will be making the final report publicly available.

Interview Guide:

In the first part of this interview, we would like to get a better understanding of your organization's membership and its focus on stormwater construction activities since 2000.

1. Who does your organization represent? Please describe your membership in terms of their size (i.e., revenues, market share), number of employees, geographic location, number of construction starts per year by State, type of construction (i.e., homebuilder and/or retail), and any other public information that may be available in aggregate. We are not asking for information related to individual members. Are there any significant groups of operators who are not members of the [name of association]? Does membership vary by geographic area or size?
2. How would you describe your organization's approach for assisting your membership in addressing environmental regulations related to stormwater?
3. Has this strategy changed since 2000? If so, how?
4. Are there any major barriers to getting information on stormwater management requirements to those responsible for planning and/or managing construction sites (e.g., operators)? Do you have any suggestions for bringing non-filing operators into the system?
5. Are there any barriers for design engineers in selecting new or innovative BMP technologies – that might be more effective from an environmental and/or cost perspective – for stormwater management at a construction site?

6. Do you have any data regarding the percentage of a site's construction costs that are dedicated to compliance with environmental regulations, or specifically for compliance with stormwater requirements? For example, do construction contracts typically itemize costs for stormwater controls, or are those controls part of a fixed cost contract for the overall construction job? If possible, describe the areas that you believe present the greatest opportunities for reducing costs associated with compliance with stormwater requirements.
7. Do your members distinguish between their interactions with Federal, State, and/or local regulatory authorities? If so, have they provided you with information regarding the frequency of this interaction (e.g., regular, periodic, or infrequent contact) or the extent of the interaction (e.g., telephone call or on-site assistance)?

In the rest of this interview, we would like to focus exclusively on your members' activities related to Phase I stormwater discharges (*i.e.*, discharges from large (> 5 acre) construction sites) from 2000 to the present. All questions, unless otherwise stated, refer to activities since 2000. Please let us know if in responding to any of the questions that follow it is difficult to distinguish between Phase I and Phase II construction activities.

> INFORMATION SHARING AND THE RELATIONSHIPS BETWEEN INDUSTRY AND EPA

Note: EPA includes the Regional Offices and headquarters offices such as the program office of the Office of Water (OW) and core offices such as the Office of Compliance (OC) and the Office of Regulatory Enforcement (ORE) in the Office of Enforcement and Compliance Assurance (OECA). The EPA Regional Office is also likely to have stormwater personnel in different offices. Where feasible, please identify the office with whom the interaction is occurring.

8. (a) When members of your Association need support on Phase I stormwater construction issues, what sources of support are they most likely to turn to for information? For each of the following types of information or assistance, please indicate where they would turn for help:
 - a. Technical information (e.g., guidance for Best Management Practices) _____
 - b. Compliance information (e.g., questions about regulatory requirements) _____

(b) If they turn to government agencies for information or support, which agencies are they most likely to turn to?

(c) Does this vary by geographic area? By the size of the company?
9. Are there other types of assistance your members have needed on Phase I stormwater/ construction issues? If so, what type of assistance did your members need, and where did they get it?
10. Do you have information on how your members regularly interact with EPA on stormwater requirements? If so, how did you obtain the information, and

- How do they interface (*e.g.*, meetings, conferences, inspections, etc.)?
 - Have interactions changed since 2000?
11. Do you have any suggestions about how EPA could provide better support to your members to promote compliance with Phase I stormwater/construction requirements?
12. Do you maintain information on your organization's website related to the Phase I Stormwater program? Do you provide links to any other websites; and if so, which ones? (list URLs).

➤ **COMPLIANCE ASSISTANCE AND OUTREACH**

13. What **outreach methods** have you used, and what information resources have you informed your membership about, since 2000 to help your members understand their stormwater discharge requirements? Please be as specific as possible. For example, if your association has provided training, workshops, or other in-person assistance to its members (*e.g.*, classroom training or workshops, on-site compliance assistance, CD-ROM based training): how frequent is this type of assistance and what is the cost of such assistance to your members?
14. Is there a cost associated with the different types of training? If so, which kinds of training?
15. Have you gotten any feedback on your outreach efforts? If so, what comments have you heard?
16. Have you conducted follow up to determine if your outreach efforts have improved compliance with Phase I requirements? If so, please describe these follow-up efforts and what you have learned?
17. Where do you see the greatest compliance concerns among your members?
18. Have you received materials from EPA on the issues listed below? Have you distributed compliance assistance materials that specifically address any of the issues listed below? If so, please identify whether it was found in materials developed by you or EPA.
- Endangered Species/Critical Habitat review
 - Receiving Stream Location
 - Impaired Water Identification
 - Applicable TMDLs
 - Timeliness of NOI submissions
 - Availability of SWPPPs onsite
 - Identification of applicable operator (*i.e.*, permittee)
 - Sequencing of construction activities to minimize sediment
 - BMP Selection adequacy

- BMP Design adequacy
- BMP Maintenance adequacy
- SWPPP Updating
- Documentation of construction activities
- Adequacy of self-inspection

Which of these issues do you believe present the most challenge(s) for your members? Did any of your members implement actions based on the above materials?

19. Which of these issues have been dealt with most effectively by compliance assistance materials?

20. What types of compliance assistance are most frequently requested?

21. Are additional compliance assistance materials or services needed for any of the issues listed above? Which issues would you say are the highest priority for needing compliance assistance?

22. Please describe any State or local industry association approaches to compliance assistance that your members found particularly helpful.

Ask what compliance assistance materials have been frequently used by the organization's members since 2000 to help Phase I construction operators understand their stormwater requirements. For each type of material used, fill out a copy of this page and the next page.

23. For each compliance assistance material you are aware of that your members have frequently **used**, please answer the questions below:

a) What is the compliance assistance material?

- If available, request a copy of the document.
- If not available, describe the scope of the compliance assistance material. (For example, is it just about stormwater, or is stormwater one of a variety of topics covered?)

b) Who developed the material?

c) How have your members accessed the material?

- | | |
|---|---|
| <input type="checkbox"/> Web site | <input type="checkbox"/> Association meetings |
| <input type="checkbox"/> Mailing | <input type="checkbox"/> PSAs |
| <input type="checkbox"/> On-site visit | <input type="checkbox"/> Journal Articles |
| <input type="checkbox"/> Group training | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Conference | |

d) Do you have information on the number of your members that used this material? If so, what data do you have?

e) Have you gotten any feedback on whether this material was helpful? If so, what comments have you heard?

f) What ideas do you have for making this material more effective in helping improve compliance with Phase I stormwater requirements? If relevant, comment specifically on the effectiveness of these materials in preparing and implementing SWPPPs. Please include ideas involving any potential changes in distribution and use, as well as in design or content.

**Copy this page and the following page as needed so that there is a response sheet
for each compliance assistance material covered.
Do not include this question in advance copy sent to Industry Contacts.**

24. If the following compliance assistance materials were not mentioned in the response to the previous question, prompt the interviewee by asking the questions below.

a) Have you seen this? _____ (fill in name of material from list) _____?

(show a copy of the material while asking the question, or if over the telephone, describe what the material looks like, who prepared it, its status, and where it can be found)

☐ Yes (*If yes, answer questions below*)

☐ No (*If no, go onto the next material*)

b) Has your organization ever distributed this material [or “information about this website”] to your members?

☐ Yes (*If yes, answer questions i – vii below*)

☐ No (*If no, go onto the next material*)

i) How have you distributed the material?

☐ Web site - *list website:*

☐ Mailing

☐ On-site visit

☐ Group training

☐ Conference

☐ Association meetings

☐ Other (specify)

ii) During what time period did you distribute material (circle all appropriate years)?

2000 2001 2002 2003 2004

iii) Do you have any information on what percentage of the target audience received this compliance assistance material? If so, what data do you have?

iv) Do you have information on the number of your members that received this material? If so, what data do you have?

v) Do you conduct any follow up to determine the effectiveness of this material in improving compliance? If so, what have you found out?

vi) What suggestions do you have for making the material more effective? If relevant, comment specifically on the effectiveness of these materials in preparing and implementing SWPPPs. Please include ideas involving any potential changes in distribution and use, as well as in design or content.

vii) If you did not distribute this material, what were your reasons for making that choice? Circle all that apply below:

- ☐ This material was not suitable for your members (*please describe why it was not suitable and what would have made it suitable*)
- ☐ This material was not needed; other materials were sufficient
- ☐ Other reasons (*please describe*)

While the previous questions have focused on specific compliance assistance materials used to communicate stormwater Phase 1 construction compliance requirements, we also want to hear about any other approaches being used by your association or others for making members aware of stormwater compliance requirements or technical options.

25. Do you have ideas about how EPA could improve **delivery** of compliance assistance and outreach to Phase I construction sites to your members?

26. Are any private or regulatory entities using approaches to delivery of compliance assistance or compliance assistance information for Phase 1 stormwater construction that you believe would be useful for EPA for its own use or for broader dissemination to States or local government agencies?

➤ **QUESTIONS RELATED TO COMPLIANCE MONITORING AND ENFORCEMENT:**

In the following section, we ask about compliance monitoring and enforcement actions related to Phase I stormwater requirements for construction activities. Please be as specific as possible in identifying the extent of the concern (i.e., percentage of the membership), the regulatory entities involved in the interaction (EPA, State, or local authorities), any geographic variations, etc. In all instances, identify how your organization solicited information from its members ((i.e., based on membership survey, telephone conferences, etc.).

27. Have you solicited information from your members on inspections of their sites? How often do EPA inspectors provide compliance assistance during the course of an on-site Phase 1 stormwater construction compliance inspection? If possible, provide data to support your response (dates, geographic location).

- _____ Frequently
- _____ Sometimes
- _____ Rarely
- _____ Never

If so, what kinds of assistance have been provided? (Describe examples.)

28. After your members have been inspected by EPA, what types of communication (including closing conferences) have they told you they receive? Please describe the substance of the information typically conveyed. From whom is the communication received and when? If possible, provide data to support your response.

29. Based on your members' experience in complying with Phase I stormwater construction requirements, how do you believe construction contractors would rank the following reasons for being in compliance?

- ___ Company practice or standard
- ___ Responsible member of the community
- ___ Legal requirement
- ___ Interest in protecting the environment
- ___ Likelihood of inspection and possible fines
- ___ Other factors (please describe)

30. The following questions relate to requirements that construction operators must implement:

a) Based on members' feedback, how would you rank the following potential non-compliance events at a construction site (where 1 is the most likely event, and 5 is the least likely event)

- ___ Not submitting an NOI
- ___ Not developing a SWPPP
- ___ Not developing a complete or sufficient SWPPP
- ___ Not implementing the SWPPP
- ___ Not submitting a Notice of Termination (NOT)
- ___ Other (specify)

b) Have the types of non-compliance events changed since 2000? If so, please describe how they have changed.

31. Based on your members' experience in complying with Phase I construction stormwater requirements, how do you believe your members would rate the following factors as barriers to compliance (where 1 is very important, and 5 is not important).

	<i>Circle Importance Rating Below</i>				
	<i>Very Important</i>		<i>Moderately Important</i>		<i>Not Important</i>
Lack of awareness that there are requirements	1	2	3	4	5
Confusion about what the requirements are	1	2	3	4	5
Perceived cost or difficulty of complying with requirements	1	2	3	4	5
Other factors (please describe)	1	2	3	4	5

32. What tools or combination of tools (including monitoring, enforcement, and compliance assistance/ outreach tools) do you think are most helpful in improving compliance?
33. Have your members been offered the Expedited Settlement Offer (ESO) for Phase I violations in your Region? If so:
- a) Are you familiar with the requirements of the ESO?
 - b) Did you members accept or reject the offer? Why, or why not?
 - c) How often has it been used?
 - d) How did your members respond to the ESO?

➤ **CONCLUSION**

34. What other suggestions do you have for EPA policies and practices that would improve compliance with the Phase I program?

Attachment D

Interview Guide for Individual Contractors

OECA STORMWATER COMPLIANCE AND ENFORCEMENT EVALUATION

Proposed Interview Guide for Construction Contractors

Introduction:

- We are contractors for EPA HQ. We have been hired as independent evaluators to assess Office of Enforcement and Compliance Assurance's implementation of its storm water compliance and enforcement program for Phase I construction activities.
- During this interview we may ask you questions that you are unable to answer because you do not have the requested information readily available. Whenever that is the case, just let us know.
- Our evaluation covers activities beginning in 2000 to the present. Phase I construction activities (> 5 acre sites) were selected because the Phase I requirements have been in place since 1992, whereas the Phase II requirements only became effective in March of 2003.

We are interviewing contacts in each EPA Region and in several States, as well as contacts at trade associations and environmental groups. We intend to convey to EPA HQ findings about aspects of OECA's program that are working well, as well as suggestions for how to improve the program. OECA will be making the final report publicly available.

Interview Guide:

In the first part of this interview, we would like to get a better understanding of your organization and its focus on stormwater construction activities since 2000.

1. Please describe your organization in terms of its size (i.e., revenues, market share), number of employees, geographic location, number of construction starts per year by State, type of construction (i.e., homebuilder and/or retail), and any other public information that may be available.
2. How would you describe your organization's approach in addressing environmental regulations related to stormwater?
3. Has this strategy changed since 2000? If so, how?
4. Are there any major barriers to getting information on stormwater management requirements to those responsible for planning and/or managing construction sites (e.g., operators)? Do you have any suggestions for bringing non-filing operators into the system?
5. Are there any barriers for design engineers in selecting new or innovative BMP technologies – that might be more effective from an environmental and/or cost perspective – for stormwater management at a construction site?

6. Do you have any data regarding the percentage of a site's construction costs that are dedicated to compliance with environmental regulations, or specifically for compliance with stormwater requirements? For example, do construction contracts typically itemize costs for stormwater controls, or are those controls part of a fixed cost contract for the overall construction job? If possible, describe the areas that you believe present the greatest opportunities for reducing costs associated with compliance with stormwater requirements.
7. Do you and other operators in your organization distinguish between their interactions with Federal, State, and/or local regulatory authorities? If so, do you have information regarding the frequency of this interaction (e.g., regular, periodic, or infrequent contact) or the extent of the interaction (e.g., telephone call or on-site assistance)?

In the rest of this interview, we would like to focus exclusively on your organization's activities related to Phase I stormwater discharges (*i.e.*, discharges from large (> 5 acre) construction sites) from 2000 to the present. All questions, unless otherwise stated, refer to activities since 2000. Please let us know if in responding to any of the questions that follow it is difficult to distinguish between Phase I and Phase II construction activities.

> INFORMATION SHARING AND THE RELATIONSHIPS BETWEEN THE CONSTRUCTION INDUSTRY AND EPA

Note: EPA includes the Regional Offices and headquarters offices such as the program office of the Office of Water (OW) and core offices such as the Office of Compliance (OC) and the Office of Regulatory Enforcement (ORE) in the Office of Enforcement and Compliance Assurance (OECA). The EPA Regional Office is also likely to have stormwater personnel in different offices. Where feasible, please identify the office with whom the interaction is occurring.

8. (a) When you or anyone in your organization needs support on Phase I stormwater construction issues, what sources of support are they most likely to turn to for information? For each of the following types of information or assistance, please indicate where they would turn for help:
 - a. Technical information (e.g., guidance for Best Management Practices) _____
 - b. Compliance information (e.g., questions about regulatory requirements) _____

(b) If they turn to government agencies for information or support, which agencies are they most likely to turn to?

(c) Does this vary by geographic area? By the size of the company?
9. Are there other types of assistance you or anyone in your organization have needed on Phase I stormwater/ construction issues? If so, what type of assistance did they need, and where did they get it?

10. Do you or anyone in your organization regularly interact with EPA on stormwater requirements? If so,
 - How do they interface (*e.g.*, meetings, conferences, inspections, etc.)?
 - Have interactions changed since 2000?
11. Do you have any suggestions about how EPA could provide better support to you and your organization to promote compliance with Phase I stormwater/construction requirements?
12. Do you maintain information on your organization's website related to the Phase I Stormwater program? Do you provide links to any other websites; and if so, which ones? (list URLs).

➤ **COMPLIANCE ASSISTANCE**

13. What do you or anyone in your organization see as the greatest compliance concerns ?
14. Have you received materials from EPA on the issues listed below?
 - Endangered Species/Critical Habitat review
 - Receiving Stream Location
 - Impaired Water Identification
 - Applicable TMDLs
 - Timeliness of NOI submissions
 - Availability of SWPPPs onsite
 - Identification of applicable operator (*i.e.*, permittee)
 - Sequencing of construction activities to minimize sediment
 - BMP Selection adequacy
 - BMP Design adequacy
 - BMP Maintenance adequacy
 - SWPPP Updating
 - Documentation of construction activities
 - Adequacy of self-inspection

Which of these issues do you believe present the most challenge(s) for you and your organization ?
Did you or anyone in your organization implement actions based on the above materials?

15. Which of these issues have been dealt with most effectively by compliance assistance materials?
16. Are additional compliance assistance materials or services needed for any of the issues listed above? Which issues would you say are the highest priority for needing compliance assistance?
17. Please describe any State or local industry association approaches to compliance assistance that you or anyone in your organization found particularly helpful.

Ask what compliance assistance materials have been frequently used by the organization since 2000 to help Phase I construction operators understand their stormwater requirements. For each type of material used, fill out a copy of this page and the next page.

18. For each compliance assistance material you are aware of that you or anyone in your organization have frequently **used**, please answer the questions below:

a) What is the compliance assistance material?

- If available, request a copy of the document.
- If not available, describe the scope of the compliance assistance material. (For example, is it just about stormwater, or is stormwater one of a variety of topics covered?)

b) Who developed the material?

c) How have you accessed the material?

- | | |
|---|---|
| <input type="checkbox"/> Web site | <input type="checkbox"/> Association meetings |
| <input type="checkbox"/> Mailing | <input type="checkbox"/> PSAs |
| <input type="checkbox"/> On-site visit | <input type="checkbox"/> Journal Articles |
| <input type="checkbox"/> Group training | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Conference | |

d) Do you have information on how many people in your organization use this material? If so, what data do you have?

e) Have you heard any feedback on whether this material was helpful? If so, what comments have you heard?

f) What ideas do you have for making this material more effective in helping improve compliance with Phase I stormwater requirements? If relevant, comment specifically on the effectiveness of these materials in preparing and implementing SWPPPs. Please include ideas involving any potential changes in distribution and use, as well as in design or content.

While the previous questions have focused on specific compliance assistance materials used to communicate stormwater Phase 1 construction compliance requirements, we also want to hear about any other approaches being used by you or others in your organization for making colleagues aware of stormwater compliance requirements or technical options.

19. Do you have ideas about how EPA could improve **delivery** of compliance assistance and outreach to Phase I construction sites?

20. Are any private or regulatory entities using approaches to delivery of compliance assistance or compliance assistance information for Phase 1 stormwater construction that you believe would be useful for EPA for its own use or for broader dissemination to States or local government agencies?

➤ **QUESTIONS RELATED TO COMPLIANCE MONITORING AND ENFORCEMENT:**

In the following section, we ask about compliance monitoring and enforcement actions related to Phase I stormwater requirements for construction activities. Please be as specific as possible in identifying the extent of the concern, the regulatory entities involved in the interaction (EPA, State, or local authorities), any geographic variations, etc

21. How often do EPA inspectors provide compliance assistance during the course of an on-site Phase 1 stormwater construction compliance inspection? If possible, provide data to support your response (dates, geographic location).

☐ Frequently
☐ Sometimes
☐ Rarely
☐ Never

If so, what kinds of assistance have been provided? (Describe examples.)

22. After you or others in your organization have been inspected by EPA, what types of communication (including closing conferences) have you received? Please describe the substance of the information typically conveyed. From whom is the communication received and when? If possible, provide data to support your response.

23. Based on your experience in complying with Phase I stormwater construction requirements, how would you rank the following reasons for being in compliance?

☐ Company practice or standard
☐ Responsible member of the community
☐ Legal requirement
☐ Interest in protecting the environment
☐ Likelihood of inspection and possible fines
☐ Other factors (please describe)

24. The following questions relate to requirements that construction operators must implement:

a) How would you rank the following potential non-compliance events at a construction site (where 1 is the most likely event, and 5 is the least likely event)

☐ Not submitting an NOI
☐ Not developing a SWPPP
☐ Not developing a complete or sufficient SWPPP

- ___ Not implementing the SWPPP
- ___ Not submitting a Notice of Termination (NOT)
- ___ Other (specify)

- b) Have the types of non-compliance events changed since 2000? If so, please describe how they have changed.

25. Based on your experience in complying with Phase I construction stormwater requirements, how would you rate the following factors as barriers to compliance (where 1 is very important, and 5 is not important).

	<i>Circle Importance Rating Below</i>				
	<i>Very Important</i>		<i>Moderately Important</i>		<i>Not Important</i>
Lack of awareness that there are requirements	1	2	3	4	5
Confusion about what the requirements are	1	2	3	4	5
Perceived cost or difficulty of complying with requirements	1	2	3	4	5
Other factors (please describe)	1	2	3	4	5

26. What tools or combination of tools (including monitoring, enforcement, and compliance assistance/ outreach tools) do you think are most helpful in improving compliance?
27. Have you or others in your organization been offered the Expedited Settlement Offer (ESO) for Phase I violations in your Region? If so:
- a) Are you familiar with the requirements of the ESO?
 - b) Did you accept or reject the offer? Why, or why not?
 - c) How often has it been used?
 - d) How did you respond to the ESO?

➤ CONCLUSION

28. What other suggestions do you have for EPA policies and practices that would improve compliance with the Phase I program?

Attachment E

Interview Guide for Environmental Non-Governmental Organizations

OECA STORMWATER COMPLIANCE AND ENFORCEMENT EVALUATION

Interview Guide for Environmental Non-Governmental Organizations

Introduction:

- We are contractors for EPA HQ. We have been hired as independent evaluators to assess Office of Enforcement and Compliance Assurance's implementation of its storm water compliance and enforcement program for Phase I construction activities.
- During this interview we may ask you questions that you are unable to answer because you do not have the requested information readily available. Whenever that is the case, just let us know.
- Our evaluation covers activities beginning in 2000 to the present. Phase I construction activities (> 5 acre sites) were selected because the Phase I requirements have been in place since 1992, whereas the Phase II requirements only became effective in March of 2003. Our 2000 starting year for analysis coincides with OECA's "2000 Storm Water Enforcement Strategy Update." *[Note: we are aware that NGOs may not be able to distinguish what happened before vs. after 2000, or Phase I vs. Phase II.]*
- Some of the questions below ask about conditions "in your area." If your organization is a national group, then please answer the question generally.
- We are interviewing contacts in each EPA Region and in several States, as well as contacts at trade associations and environmental groups. We intend to convey to EPA HQ findings about aspects of OECA's program that are working well, as well as suggestions for how to improve the program. OECA will be making the final report publicly available.

Interview Guide:

1. Please briefly describe who your organization represents, and the geographic scope of your activities.
2. Please briefly describe the range of your organization's activities or efforts that relate to stormwater.
3. If applicable, please describe your organization's activities with regard to stormwater from construction sites. For each activity, please estimate how long your organization has been involved in this effort.
4. What is your organization's perspective on the importance of stormwater pollution from construction sites as compared to other sources of stormwater pollution?

5. Have you used any information that EPA has developed about stormwater from construction sites (e.g., information on EPA's websites, mailings, presentations, etc.)? If so, what materials did you use? For each material, did you find it useful, and do you have suggestions about how to improve it?

6. Are there topics related to stormwater construction where you would like more information from EPA? If so, please describe.

7. Are you generally familiar with the regulatory requirements for stormwater run-off from large (>5 acre) construction sites?

8. What is your view about the degree to which the construction industry in your area complies with these requirements?

9. Comparing the year 2000 to now, do you think that stormwater pollution from construction sites in your area has increased or decreased? On what do you base your opinion?

10. Where do you see the greatest compliance concerns?

11. Based on your experience, how would you rate the following factors as barriers to compliance (where 1 is very important, and 5 is not important)?

	<i>Circle Importance Rating Below</i>				
	<i>Very Important</i>		<i>Moderately Important</i>		<i>Not Important</i>
Lack of awareness that there are requirements	1	2	3	4	5
Confusion about what the requirements are	1	2	3	4	5
Perceived cost or difficulty of complying with requirements	1	2	3	4	5
Other factors (please describe)	1	2	3	4	5

12. What do you do with information regarding potential noncompliance with stormwater requirements at construction sites? Do you contact anyone; and if so, who?
13. Do you have any interactions with regulators with regard to stormwater from construction sites? What is the nature of your interactions? If possible, please distinguish between interactions you have with local vs. state vs. federal regulators.
14. Do you have any interactions with the construction industry with regard to stormwater from construction sites? What is the nature of your interactions? If possible, please distinguish between interactions you have with individual companies vs. trade associations.
15. Have you seen evidence of environmental damage from construction sites? If so, please describe whether these sites are commercial or residential, and whether they are Phase I sites (greater than 5 acres) or Phase II sites (equal to or less than 5 acres).
16. Do you have any suggestions about what steps you think the EPA should take to improve compliance with the construction stormwater requirements?
17. Do you have particular suggestions for how EPA conducts inspections and enforcement related to its enforcement program for storm water?
18. Do you have particular suggestions for how EPA offers compliance assistance to the construction industry related to stormwater requirements?
19. Is there any other feedback you would like to offer EPA on its Stormwater program?
20. Are you aware of any citizens' suits that have been filed?

Attachment F
Summary of Findings from EPA Regional Contacts

Attachment F

**SUMMARY OF FINDINGS FROM EPA REGIONAL CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (Region)
Levels of Compliance: What is the level of compliance with storm water regulations in the construction industry?	
What is the universe of regulated entities?	<p>EPA Regions do not have up-to-date information regarding the potential universe of regulated entities. No Regional staff we spoke with have estimates of the number of regulated entities other than the number of permittees. Some Regions mention the estimates included in the Phase I and Phase II Reports to Congress (Regions 6 and 9). Four Regions say that failure to submit an Notice of Intent (NOI) is one of the violations most frequently found during inspections (Regions 1, 2, 6, and 10).</p>
<p>What do we know about the level of compliance with storm water regulations in the construction industry, with and without enforcement?</p> <p>What methodology would help EPA get a handle on the state of compliance?</p> <p>Indicators of Compliance include:</p> <ul style="list-style-type: none"> • Number of permitted sites • Changes in permitting activity • Percentage of inspections that result in formal enforcement actions per year 	<p>Due to lack of readily accessible data starting in 2000, we are not able to identify trends in the number of permittees over the time period covered by the evaluation. Most Regions have readily accessible data on the number of permittees only for 2003. The total of permittees in reporting Regions for this year was 4,452 (Regions 1, 2, 3, 4, 5, 6, 7, 8, and 9). This number accounts only for entities that have submitted NOIs for the Federal EPA Construction General Permit (i.e., permittees in authorized states are not included).</p> <p>Several Regions note that they use the eNOI processing center, which became active in 2003, to track the number of permittees (Regions 2, 3, 4, 8, and 10). Some Regions have very positive responses to the electronic NOI (eNOI) system. For example, Region 8 notes that the database is user-friendly and helps contractors understand the process of getting a permit (prior to the eNOI system, many contractors thought that the application was the same as the permit). However a few Regions note that the data in the eNOI database can be unreliable (Regions 1 and 2), or that there can be delays in uploading paper permits and posting permit approvals into the eNOI database (Region 8). Concerns about the eNOI data include missing records (where a contractor has a copy of a permit but it does not appear in the database) and inaccurate geographic coordinates entered into the system by contractors.</p> <p>Some Regions note that they can see the results of their activities in increased permitting activity. For example, Region 10 observed an increase in the number of permittees following</p>

Attachment F

**SUMMARY OF FINDINGS FROM EPA REGIONAL CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (Region)
	<p>implementation of the Expedited Settlement Offer (ESO) from 839 active permittees in June 2004 to 1,407 active permittees in October 2004 (a 68 percent increase over four months). Other activities that Regions say can trigger an increase in permitting activities include publication of an enforcement action or hosting of a well-attended compliance assistance event.</p> <p>For 2003, 42 percent of on-site compliance inspections resulted in enforcement actions, according to readily available Regional data. There are not sufficient data for other years to establish trends for this compliance indicator over time.</p>
<p>What is the nature of non-compliance? What types of violations are most commonly found?</p>	<p>On average, Regions rank having an inadequate Storm Water Pollution Prevention Plan (SWPPP) as the violation most often found during inspections. The next most frequently found violations are failure to properly implement a SWPPP and failure to submit an NOI. On average, failure to develop a SWPPP was found less frequently. Most Regions do not rank the frequency with which they find sites that fail to submit a Notice of Termination (NOT), and two Regions report that addressing failure to submit a NOT is not a focus for them (Regions 3 and 10). However two Regions rank failure to submit a NOT as a the third most common violation (Regions 5 and 6). A few Regions note that they frequently find that construction sites have inadequate or improperly-implemented or -maintained BMPs (Regions 4, 8, and 10).</p>
<p>What specific issues contribute to non-compliance?</p>	<p>The top three issues that Regions see as contributing to non-compliance, in the order of the frequency with which they are mentioned, are 1) BMP maintenance adequacy, 2) adequacy of self-inspections, and 3) BMP selection adequacy. Other issues that more than half the Regions mention include BMP design adequacy and SWPPP updating. No Regions mention endangered species/critical habitat review or applicable TMDLs as important issues contributing to non-compliance.</p> <p>Some suggest that the fact that the storm water program is based on BMPs, rather than uniform standards, may make it more challenging to achieve compliance. One Region says that increased specificity in the guidelines would make it easier for construction owners/operators to comply with the requirements (Region 9).</p>

Attachment F

**SUMMARY OF FINDINGS FROM EPA REGIONAL CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (Region)
What factors influence levels of compliance with storm water regulations in the construction industry (e.g., is cost a driver)?	Most Regions agree that a very important contributor to non-compliance is insufficient enforcement presence (i.e., the belief on the part of construction operators that they won't get caught if they violate the regulations). There are diverse perspectives among Regions about the importance of other contributors to non-compliance, but on average, the next most important contributor is seen as confusion about what the requirements are, followed by perceived cost or difficulty in complying with requirements and lack of awareness that there are requirements. One Region notes that contributors to non-compliance have changed, and that historically, lack of awareness that there are requirements, and finally, confusion about what the requirements are were very important. (Region 1). Some Regions also note other important contributors to non-compliance, such as no one taking responsibility for the site (Region 5), pressure on builders to complete homes as quickly as possible (Region 3), lack of corporate commitment to address storm water issues (Region 3), and insufficient training of construction operators (Region 3).
To what extent do Regions review NOIs submitted to assess their quality/completeness?	None of the Regions regularly conduct a detailed review of NOIs. Four Regions say they sometimes review NOIs in special circumstances (e.g., when the NOI is submitted by mail instead of through the Federal Processing Center, or in the context of an enforcement case) (Regions 2, 5, 6, and 7). One Region expresses an interest in Reviewing NOIs and SWPPPs (Region 8). Two Regions mention that they use NOIs stored in the eNOI system when targeting inspections or to check if a site has a permit (Region 2 and 8).
Do States receive and review copies of SWPPPs?	The majority of Regions say that States in their jurisdiction do not ask for or review SWPPPs (Regions 1, 2, 3, 5, 6, 7, and 8). In some cases, States used to require permittees to submit SWPPPs, but no longer do so (Regions 6 and 8). Only two Regions say states in their jurisdiction require submission of and review of SWPPPs (Regions 4 and 10), although in the case of Region 4, it is local soil and water conservation districts rather than the states themselves (with the exception of sites in sensitive areas) that review the plans.
What do we know about what compliance assistance and enforcement tools or combination of tools cause compliance or	Regions note that a combination of compliance assistance, inspections, and enforcement are necessary to bring construction projects into compliance. The combination of compliance assistance and inspections helps make developers aware of their environmental

Attachment F

SUMMARY OF FINDINGS FROM EPA REGIONAL CONTACTS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (Region)
<p>return to compliance?</p> <p>Is there a return to compliance with out assistance, monitoring, and/or enforcement, and if so what causes this return to compliance?</p>	<p>responsibilities and enforcement gives them incentives to come into compliance. (Regions 1, 2, 3, 4, 5, 6, 7, and 10) Some Regions note that increased enforcement actions help spread the word about appropriate storm water compliance activities (Regions 1, 4, and 7). Most Regions responding say that enforcement is one of the most helpful tools in improving compliance (Regions 1, 2, 3, 4, 5, 6, 7, and 8). Others note that enforcement alone may not be enough to educate developers, and that compliance assistance activities should accompany enforcement (Regions 5, 6, 7, and 10).</p> <p>Regions point out the need for more resources to enhance their field presence, but acknowledge the limits on available resources. Two Regions stress the importance of having a field presence (Regions 1 and 2). Another Region says that additional resources to maintain a field presence would be useful, especially given the large number of construction sites and the speed at which construction is completed, but says it is difficult to weigh the environmental benefit of added resources to the cost of those resources (Region 5).</p>
<p>Compliance Assistance: Are EPA’s compliance assistance materials being used? If so, how are they being used and are they effective?</p>	
<p>What are different ways in which compliance assistance is delivered?</p>	<p>Several compliance assistance outreach strategies exist. In addition to disseminating information via websites, Regions also commonly reach construction site operators through on-site visits, trainings, and in-person meetings.</p> <ul style="list-style-type: none"> • All Regions have websites for storm water construction. • Many Regions conduct on-site visits. While the primary aim of most of these visits is compliance, Regions often provide assistance during the visits (Regions 3, 6, 7, 8, 9, and 10). Four Regions (3,4,7,10) reported very limited compliance assistance site visits, usually in response to request and/or for special sites (e.g., federal facilities). • Many Regions conduct training targeted at the construction sector. The frequency of training ranges from one to fourteen times per year. Audiences include contractors, specific construction companies, home builders' associations, and others in the industry (Regions 1, 4, 5, 6, 7, 8, 9, and 10; also, in Region 2, EPA’s Puerto Rico office provides training). • Several Regions hold meetings with the construction sector, including building associations, contractors, and companies (Regions 1, 3, 4, 5, 6, 7, 8, 9, and 10).

Attachment F

**SUMMARY OF FINDINGS FROM EPA REGIONAL CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (Region)
	<ul style="list-style-type: none"> • Some Regions issue limited mailings, which are generally issued to Tribes or small target groups (Regions 1, 2, 4, 5, 9, and 10). • A few Regions conduct training assistance targeted at state/local regulators and tribes; trainings are typically offered one to several times each year (Regions 1, 4, 5, 7, and 8). • A few Regions hold meetings with other regulators such as State and local agencies, small MS4s, and storm water staff (Regions 5, 8, and 9). • Two Regions conduct trainings on general storm water/Phase I compliance. These are mainly directed at the regulated community (Regions 6 and 8). • Two Regions attend several yearly conferences sponsored by EPA or others targeted to state and local regulators, the construction sector, or other audiences (Regions 5 and 8). Region 7 expects to sponsor a conference in 2005. • Two Regions published journal articles (Regions 1 and 8). • One region issues press releases on enforcement actions taken (Region 9).
<p>Which kind of information delivery (websites, mailings, workshops, manuals) works best for the construction industry in terms of getting information to the regulated community and improving compliance? Rank methods of delivery by effectiveness.</p>	<p>In general, many Regions rate in-person outreach as more effective than distribution of materials alone. Several Regions note their perception that on-site visits, meetings, trainings and conferences are the most effective compliance assistance activities (Regions 1, 2, 4, 5, 6, and 8). Some Regions also consider websites to be effective (Regions 5, 6, and 8). One Region highlights the value of enforcement actions and publicizing those cases in increasing NOI submissions and SWPPP implementation (Region 9).</p> <p>Assistance outreach is generally appreciated by the regulated community and co-regulators. Audiences tend to give positive reviews, and following conferences or meetings, Regions note that they have experienced increasing requests for compliance assistance and outreach (e.g., requests for Regions to make presentations on storm water/construction issues) (Regions 1, 3, 5, 6, 7, 8, 9, and 10).</p>
<p>Do we measure compliance assistance reach? If so, where/how? How accurate/complete are the data?</p>	<p>To date, Regions have conducted little follow-up to determine whether outreach efforts have improved compliance (Regions 2, 3, 4, 5, 6, 7, 8, and 9). However, one Region is currently planning such follow-up (Regions 7) and another Region observes that NOI</p>

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Evaluation Question	Finding (Region)
	submissions increase as outreach increases (Region 1).
Is the compliance assistance delivery reaching the regulated community?	Regions vary in the degree to which they track the number of entities in the regulated community reached by compliance assistance. Based on data that Regions had readily available, over 3,000 members of the regulated community were reached in 2003 (Regions 1, 3, 4, 6, 7, 8, 9, and 10) through trainings, conferences or other direct contacts. This figure does not include website hits or mailings. Only one Region has estimates of the percentage of the regulated community reached by different types of outreach (Region 8). For example, Region 8 estimates that it has reached 60 percent of construction contractors through compliance assistance training targeted to the construction sector.
Are there suggestions from Regions about how compliance assistance outreach/delivery of materials could be improved? Identify/propose more effective delivery methods. How can EPA partner better with the states/associations/local governments to “get the word out” or provide other assistance needs?	Regions recommend emphasizing in-person outreach strategies to the extent possible with limited resources. Regions note that direct contact with contractors is the best way to improve delivery of compliance assistance (Regions 1, 2, 3, and 6). However, they also note the difficulty and intense resource requirements of this approach (Regions 3 and 6). Other suggestions to improve the delivery of compliance assistance include: ask the industry directly what information they need (Region 3); use intermediaries, such as such as industry associations and MS4s, to get the word out (Regions 3, 8); encourage Regions and States to conduct their own outreach rather than focusing on developing materials at the national level, since they are closer to the regulated community than EPA HQ (Region 1); distribute materials such as training videos to local agencies (Region 5); develop self-audit checklists and training for industry (Region 4); and provide a complete handbook to send out when people call with questions (Region 6).
What specific compliance assistance materials do Regions use? To what extent do Regions use compliance assistance materials prepared by EPA HQ?	Regions distribute a wide variety of compliance assistance materials through their websites, through workshops and meetings, during inspections, and in responses to questions over the phone. Examples of materials Region distribute include fact sheets and brochures, lists of resources, inspector checklists, SWPPP checklists, excerpts of BMP manuals, presentations, enforcement press releases, small business fact sheets, videos, and posters.

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	<p>Regions draw on compliance assistance materials developed by EPA HQ, States, Regions (both the Regions' own materials and those developed by other Regions), and outside groups (e.g., articles from the Center for Watershed Protection).</p> <p>Since Regions draw on a wide variety of sources for their compliance assistance materials, a relatively small percentage of the materials Regions distribute were developed by Headquarters. Several Regions note that they need to tailor materials so that they are specific to the Region or to their target audiences.</p> <p>Some of the compliance assistance materials that EPA HQ has prepared are widely known and distributed by Regions. The two materials distributed by the most Regions include the Construction Industry Compliance Assistance Center (prepared with support from OECA), and the brochure "Does Your Construction Site Need a Storm Water Permit" (prepared by the Office of Water). The material recognized by the most Regions is the "Storm Water and the Construction Industry Poster," however four Regions who are aware of the poster do not distribute it, in some cases because there are not sufficient supplies (Regions 4 and 6). In a few cases, several Regions are aware of a material but choose not to distribute it (e.g., the 1992 Storm Water Pollution Prevention Plans Guidance Manual and the After the Storm Brochure). In other cases, several Regions are not aware of a material (e.g., the List of Compliance Assistance Tools for Construction Sites and the Office of Water Storm Water Month Website).</p>
<p>Is there feedback from Regions about what materials from EPA HQ work well, and what could be improved?</p>	<p>Regions provide feedback on materials prepared by EPA HQ ranging from very positive responses to suggestions for how to improve or update materials. Specific comments are organized by material below:</p> <ul style="list-style-type: none"> • Construction Industry Compliance Assistance Center (www.cicacenter.org). Several Regions have positive comments about the website. Two Regions note the importance of having model SWPPPs on the website (Regions 1 and 9). One of these Regions thinks that the model SWPPPs currently posted are not quite sufficient (Region 9). • National Environmental Compliance Assistance Clearinghouse (cfpub.epa.gov/clearinghouse). No specific comments are provided.

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	<ul style="list-style-type: none"> • Federal Environmental Requirements For Construction. One Region notes that this material has effectively put a spotlight on the Construction General Permit (Region 2), and another Region says that staff recently ordered this material because they thought it would be useful to distribute (Region 6). One Region comments that this material is attractive, concise, and colorful, but notes the difficulty of printing out sufficient copies of color materials without funds earmarked for printing/production (Region 1). Region 1 also notes this material is most appropriate to big construction operators and consultants. • List of Compliance Assistance Tools For Construction Sites. No specific comments are provided. • OECA Enforcement Alert. One Region reports that this is a good material to distribute to state and local regulators, and to raise awareness of enforcement (Region 3). • Storm Water Pollution Prevention Plans Guidance Manual (1992). One Region has very positive comments about this guide, and distributes it frequently, especially in response to questions (Region 5). Region 5 also highlights the value of having both an executive summary and a longer version of this document. Several other Regions request that this document be updated (Region 1, 4, 7, and 9), and one Region asks that the manual be made more user-friendly (Region 4). • Office of Water Storm Water Month Website. Most Regions are not familiar with this material, but one Region notes that it is useful in conducting outreach to MS4s (Region 1). • Does Your Construction Site Need A Storm Water Permit? A Construction Site Operator's Guide To EPA's Storm Water Permit Program. Most Regions do not offer specific feedback on this material; however Region 1 has several comments. Region 1 comments that the brochure is good, though a little redundant with existing materials. Region 1 also notes that the brochure does not talk about the Phase I program as a point source program, which may raise concerns. Finally the Region suggests providing a phone number on the brochure, since some operators cannot access the web. • After The Storm Brochure. Regions do not offer specific feedback on this material; however, one Region notes that there is a related video that is very helpful (Region 5). • Storm Water And The Construction Industry Poster. Most Regions have positive feedback about the poster. Several Regions say the poster is valuable (Region 1, 2, 6, and 8).

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	<p>and a few note that they have seen it in use in the field (e.g., in state offices or at construction sites) (Region 1 and 7). A few Regions say that there were initially errors on the poster, which have been corrected (Region 1, 8, and 9). Two Regions request that the poster be translated into Spanish (Region 2 and 8), and three Regions say they have had difficulty getting larger format copies of the poster (Region 2, 4, and 6). One Region thinks the poster is not likely to be helpful (Region 3).</p> <ul style="list-style-type: none"> • Door Hanger: "Storm Water Pollution Found In Your Area!" No specific comments are provided.
What specific issues are addressed through compliance assistance materials?	The majority of Regions distribute compliance assistance materials that address a broad array of issues. The issues most often addressed in materials distributed by Regions included availability of SWPPPs onsite; identification of the permittee; BMP selection, design, and maintenance adequacy; SWPPP updating, and adequacy of self-inspection. Issues addressed least often by compliance assistance materials include endangered species/critical habitat review, receiving stream location, and impaired water identification.
Which issues have been addressed most effectively by compliance assistance materials, and which issues would benefit from further compliance assistance efforts?	Regions have a variety of viewpoints on specific issues addressed by compliance assistance materials. Most Regions did not have specific comments on what issues have been addressed most effectively, although some Regions state that compliance assistance materials have effectively communicated about applicable TMDLs (Region 8), how to prepare SWPPPs (Region 4), and adequate self-inspection (Region 4). A few Regions point out the need for additional materials on applicable TMDLs (Regions 1 and 5) and BMP selection and design adequacy (Regions 1 and 10).
Compliance Monitoring: What is the level of compliance monitoring done by EPA?	
What compliance monitoring activities are measured?	<p>Most Regions have readily accessible data on selected compliance monitoring activities for Phase I storm water construction for at least one year (2003). Specific activities tracked by most Regions include on-site compliance inspections, Section 308 requests, and citizen complaints.</p> <ul style="list-style-type: none"> • All Regions have readily accessible data for 2003 on on-site compliance inspections, but only seven Regions have data for 2004 (Regions 1, 2, 5, 6, 7, 9, and 10), and only two

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	<p>Regions provide data on inspections dating back to 2000 (Regions 6 and 10).¹</p> <ul style="list-style-type: none"> • Nine Regions have readily accessible data for 2003 on Section 308 requests (Regions 1, 2, 3, 4, 5, 6, 7, 9, and 10), but only five Regions have data for 2004 (Regions 1, 5, 6, 9, and 10), and only one Region has data dating back to 2000 (Region 6). • Nine Regions have readily accessible data for 2003 on citizen complaints (Regions 1, 2, 3, 4, 5, 6, 7, 8, and 9), but no Regions have data for prior years, and only one Region estimates data for 2004 (Region 5). Also, Region 6 notes that citizen complaints may be tracked either in ICIS or in the Regional database (CAFE), so records may not indicate the total number of citizen complaints. • Regions do not have readily accessible data available for off-site record reviews, although one Region said it's a routine part of the inspection process.
<p>What are levels of monitoring, currently and over time?</p>	<p>Most Regions report increases in compliance monitoring for storm water construction activities over the course of the evaluation period. In 2003, Regions report 1,011 on-site compliance inspections for Phase I construction storm water, including 17 inspections that are identified as having been conducted by contractors.² Due to the lack of readily accessible data for many Regions prior to and following 2003, it is not possible to establish national trend lines on the number of inspections. However, of the seven Regions that do report inspection data for multiple years, five report increasing numbers of inspections over the period for which data are available (Regions 1, 2, 5, 6, and 7). In one Region there were roughly the same number of inspections in 2003 and 2004 (Region 9), while another Region experienced a peak number of inspections in 2003, followed by a decline (Region 10). There are not sufficient data on other types of compliance monitoring activities to estimate current levels of monitoring or trends over time.</p>

¹ The interview protocol asked Regions for readily accessible data, in order to minimize the burden on the Regions of completing the interview. However, Region 6 volunteered to manually review its files in order to find the data on compliance monitoring activities requested as part of the interview protocol. This took a considerable amount of effort on the part of Region 6 staff. Therefore, while the data are very helpful in compliance monitoring activities, these data may not be "readily accessible."

² We do not have complete data on the number of inspections conducted by contractors, and we did not ask Regions to distinguish between contractor-led inspections and those conducted by Regional staff.

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	Regions 4 (federal facilities in FL) and 6 (TX) changed delegation status prior to 2000, but continued responsibility for construction sites until new state general permits came into force between 2000 and 2004. Region 5 did not have an approach to the construction storm water program until FY 2005 began.
Do Regions and states share compliance monitoring work? If so, how?	Most Regions report some level of sharing of compliance monitoring work (Regions 1, 3, 5, 6, 7, 9, and 10). Joint inspections are cited by three Regions, though the frequency of these varies state-by-state (Regions 6, 7, and 9). For example, 90 percent of inspections in Hawaii are jointly conducted with Region 9, while in California the State is the lead on all inspections. Two Regions report that compliance monitoring is divided up and the EPA supports States with inspections on an as-requested basis (Regions 1 and 10). Two States indicate either minimal or no sharing of compliance monitoring work (Regions 4 and 8). We do not have information from Region 2 for this question .
What criteria are being used by Regions for targeting inspections?	Targeting strategies vary by Region, though a majority of regions focus on large construction sites or sites that have been referred to the Region. Four Regions focus inspections on large and big box developers (Regions 3, 4, 6, and 8), and four Regions target areas referred by states or with citizen complaints (Regions 1, 5, 7, and 9). Other criteria include watershed based approaches (Region 3, and in the future Region 8), identifying sites with many home sales (Region 7), and focusing on wet weather areas and urban centers (Regions 1 and 5) or targeted geographic locations (Region 9).
Do the criteria appear to affect the types of violations found?	There is not sufficient data to correlate the targeting criteria with the types of violations found, as Regions do not have readily available data on the numbers of different types of violations.
Do Regions provide compliance assistance during inspections?	All Regions provide some level of compliance assistance during inspections. Four of the Regions report handing out informative materials as part of inspections (Regions 2, 5, 6, and 10). Three Regions provide more interactive compliance assistance during inspections, such as answering an operator's compliance questions (Regions 3, 4, and 5). We do not have information from the other Regions for this question (Regions 1, 7, 8, 9, and 10).

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Evaluation Question	Finding (Region)
Do Regions conduct exit interviews?	<p>Every Region conducts a closing conference (exit interview) at the end of an on-site Phase 1 storm water construction inspection. Five Regions indicate that an interview takes place most of the time (Regions 2, 3, 5, 7, and 10), while two Regions state that interviews always take place (Regions 6 and 8). Typically, the Regions will use the interview to discuss problems found on-site. Three Regions indicate that compliance assistance is offered during these interviews (Regions 5, 8, and 10).</p> <p>Most Regions report that an exit interview is not conducted on site only in cases when the operator is not available (Regions 1, 3, 4, 5, 6, 7, and 8). The Regions indicate that this is an unusual circumstance that typically happens when inspections take place on short notice. Two Regions indicate that exit interviews are conducted over the phone when on site interviews are not possible (Regions 6 and 8). Region 2 reports that on-site exit interviews are not conducted after hours. Regions 9 and 10 do not report any circumstances that would prevent an on-site exit interview.</p>
Enforcement: How is enforcement being conducted in this sector and is it effective?	
How do Regions determine the appropriate enforcement response to violations at the site?	<p>Regions most commonly base the enforcement response on the severity (potential or actual) of the violation at the site (Regions 2, 3, 7, 8, and 10). Three Regions cite the history of a certain violator (i.e., past problems) as an important determinant in pursuing enforcement (Regions 3, 7, and 10). By contrast, Region 9 currently bases its actions on the Enforcement Response Guide, while Region 5 is waiting for this guide to be finalized. Region 6 performs an AO for any site where it finds a violation. The availability of legal and technical resources influences the enforcement response of Region 1. We do not have information from Region 4 for this question. As noted above, Regions 4 and 6 changed delegation status between 2000 and 2004, and Region 5 did not have an approach to the construction storm water program until FY 2005 began.</p>

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Evaluation Question	Finding (Region)
What enforcement actions are measured? How accurate/complete are the data?	<p>Many Regions have readily available data on some formal enforcement actions for storm water/construction activities, but no Regions have readily accessible data for informal enforcement actions specific to construction. Six Regions report the number of Expedited Settlement Offers (ESOs) in 2004 (1, 2, 4, 5, 6, and 10). Eight Regions report the number of Administrative Penalty Orders (APOs), Administrative Orders (AOs), Civil Judicial Referrals dating back to 2000 (Regions 1, 2, 3, 4, 5, 6, 7, and 8). Regions do not track separate records for the number of AO/APOs, and Regions do not have readily accessible data on any criminal referrals. Regions also do not have readily accessible data on informal enforcement actions, including Notices of Violation (NOVs).</p>
What are levels of enforcement? What are types of enforcement actions taken and trends for each type of enforcement action over time.	<p>There are few discernable trends in the number of formal enforcement actions taken; however, four Regions report using the ESO since it was introduced.</p> <ul style="list-style-type: none"> • Since the ESOs policy was introduced in 2003, four Regions report using it, and the total number of ESOs issued in 2004 is 147 (Regions 1, 2, 6, and 10). • The total number of APOs Regions report declined from a high of over 100 in 2000 and 2001 to 48 in 2004. These figures include a substantial number of cases recorded in PCS by States in Region 6. At the level of individual Regions, there are no discernable trends in the number of APOs between 2000 and 2004. • The total number of AOs Regions report peaked in 2003 at 381 cases. These figures include a substantial number of cases recorded in PCS by States in Region 6. At the level of individual Regions, there are no discernable trends in the number of AOs between 2000 and 2004. • The total number of Civil Judicial Referrals peaked in 2000 at 30 cases. These figures include a substantial number of cases recorded in PCS by States in Region 6. At the level of individual Regions, five Regions experienced an increase in the number of Civil Judicial Referrals in 2003 (Regions 2, 4, 5, 7, and 8).

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<p>Are enforcement outcomes measured? If so, how are they measured? Are there additional outcomes from enforcement that could be measured?</p>	<p>Regions have a variety of perspectives with regard to measuring enforcement outcomes. Three Regions confirm data on pounds of sediment reduced as recorded in Case Conclusion Data Sheets (Regions 3, 4, and 7). Two Regions say they do not report data on sediment reductions (Regions 5 and 10). Three Regions express concerns about the use of the methodology for calculating sediment reductions in the Performance-Based Strategy for Storm Water National Compliance and Enforcement Priority (Regions 1, 8, and 9). Concerns include that the model gives an inaccurate perception of the level of precision that can be achieved in estimating sediment reductions, leading Regions to have little confidence in the results of the methodology. One Region says that outcomes should be measured in terms of “actual pollutants,” while another Region suggests that acres protected would be a better measure of outcomes (Regions 9 and 1, respectively).</p>
<p>Are there data on citizen complaints? If so, how accurate/complete are the data? Are there observable trends in citizen complaints over time?</p>	<p>Few Regions have systems to track data on citizen complaints, and those that do generally do not differentiate complaints related to storm water from construction sites. Three Regions mention that they have systems to track citizen complaints (Region 4, 6, and 7), but two of these Regions note that the tracking systems do not identify whether the complaints relate to storm water from construction sites. There are not sufficient data on citizen complaints to track trends in the data or averages across Regions.</p>

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Evaluation Question	Finding (Region)
Key OECA Policies/Tools: What effect are OECA's key policies having on the ability of EPA Regions and States to implement the Phase I Storm Water Compliance and Enforcement Program; and on the behavior of the construction industry?	
<p>What effect did OECA's Storm Water Strategies have on the Regions?</p> <ul style="list-style-type: none"> • 2000 Storm Water Compliance and Enforcement Strategy • 2003 Storm Water Compliance and Enforcement Strategy 	<p>The storm water strategies issued by OECA have been widely adopted, and many Regions comment that the strategies confirmed approaches they were already taking. Several Regions say that the 2003 strategy led them to enhance their focus on specific aspects of their storm water programs.</p> <ul style="list-style-type: none"> • The 2000 Storm Water Compliance and Enforcement Strategy was widely implemented at the Regional level (Regions 2, 4, 6, 8, and 9), although most of these Regions note that their strategy confirmed what they were already doing (Region 4, 6, and 9). The strategy did affect a few Regions by encouraging them to focus on non-filers (Region 10) or to shift their focus from CAFOs to storm water (Region 8). Two Regions comment that their Regions had a large impact on the national strategy (Regions 4 and 6). One Region commented that the strategy was not helpful (Region 10). • Several Regions comment that the 2003 Storm Water Compliance and Enforcement Strategy fits well with their storm water activities (Regions 1, 3, 5, 7, 8, and 9). One Region says that the strategy reaffirmed what they were doing and gave them a better roadmap for their activities (Region 3). Some Regions note that the Strategy did cause Regions to emphasize work on construction (Regions 3 and 9), compliance assistance (Region 6), watersheds (Regions 3 and 4), big box retail (Region 4), and storm water (Region 7). Three Regions comment that the strategy did not affect them (Region 2, 8, and 10). Two Regions request that EPA HQ be attuned to the resources required to implement the strategy (Region 1, 10). Region 10 also commented that HQ should involve the Regions more in the planning process for developing strategies. • The majority of Regions are in the process of completing their responses to the 2003 strategy and can not yet furnish the finished responses (Regions 2, 3, 4, 5, 6, 7, 8, 9, 10). <p>As noted above, Regions 4 and 6 changed delegation status between 2000 and 2004. Region 5</p>

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Evaluation Question	Finding (Region)
	did not have an approach to the construction storm water program until FY 2005 began.

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Evaluation Question	Finding (Region)
Expedited Settlements Offer (ESO)	<p>A majority of Regions interviewed have positive responses to the ESO and are using it for storm water construction cases, but a few regions say that the ESO is not relevant or is detrimental.</p> <ul style="list-style-type: none"> • Some Regions find the ESO very useful in improving compliance and raising awareness of storm water construction requirements (Region 2, 3, 6, 7, and 10). Regions note that ESOs provide a time efficient and less burdensome approach to issuing penalties (Regions 1, 6, 7, and 10). These Regions say the ESO speeds the process of addressing non-compliance and leverages the Regions’ enforcement presence by mailing out the notice soon after conducting an inspection. However, some Regions say that just as much paperwork is required for an ESO as for a traditional penalty (Regions 1, 5, and 7). • Other Regions comment that the ESO is not relevant because: a) a similar program was already in place (Region 3), b) the limitations of the ESO precluded use in the types of cases the Region is pursuing (Regions 4 and 5), or c) the ESO has to be adapted for state permits (Regions 7 and 9). • One Region commented that the ESO was detrimental, because it impacted enforcement cases already in progress (Region 8). • In general, Regions say the construction industry responded positively to ESOs (Regions 2, 6, and 7), and one Region notes that ESOs have increased interest from the regulated industry in compliance assistance training (Region 7). • Several Regions have had an easy time with ESO implementation (Regions 2, 3, and 7). Suggestions for improvement include removing limitations to first-time violators (Regions 4 and 6), allowing ESOs for bigger sites (Regions 4 and 6), including other sectors for ESO use (Region 9), and assessing how ESOs could be applied to state permits (Regions 7 and 9).
Supplemental Guidance to the CWA Settlement Penalty Policy for Phase I Violations (<i>Question 66 and full text search on “penalty policy”</i>)	<p>Most Regions are using the Supplemental Guidance to the CWA Settlement Penalty Policy at least to some degree. Eight of the nine Regions responding have used the Supplemental Guidance to the CWA Settlement Penalty Policy (Regions 1, 3, 4, 5, 6, 7, 8, and 10). The Guidance has been used to varying degrees: some Regions use the Guidance for all cases (Regions 3 and 7) while other Regions use the guidance for a very limited number of cases</p>

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	<p>(Regions 5 and 6). Several Regions put forward recommendations for improvements. Generally, Regions would like to have a simple, consistent procedure to assess penalty amounts (Regions 5, 6, 8, and 10). Suggestions include providing a technical expert to comment on the economic benefit of non-compliance (Region 10) and providing a comprehensive list of estimated costs for infringement activities (Regions 5 and 6). One Region also commented that the Settlement Penalty Policy should be expanded to other sectors such as industrial and MS4 (Region 7).</p>
Data availability/sharing	
<p>What data do States share with EPA?</p>	<p>Most Regions report that States regularly share data on the storm water compliance and enforcement program (Regions 1, 4, 5, 6, 7, and 9). These States provide such information as inspections, NOIs submitted, and enforcement actions. Four Regions report that States provide an insufficient amount of data on storm water/construction activities (Regions 2, 3, 8, and 10). Only two Regions note that States enter storm water construction and compliance monitoring information into PCS (Regions 1 and 4). Regions 4 and 9 indicate that 106 grants are the impetus for the provision of data from certain States.</p> <p>None of the Regions are aware of any readily available data on violations found by States since 2000. Several Regions indicate that States do not formally share this information with the EPA (Regions 1, 5, 6, 7, and 8). Region 8 notes that “States report on inspections and enforcement, but this is not the same as violations.” We do not have information from Region 9 for this question.</p> <p>Most Regions do not have any readily available data on enforcement actions taken by States since 2000 (Regions 1, 2, 7, 8, 9, and 10). We do not have information from five Regions for this question (Regions 1, 2, 8, 9, and 10). Three Regions report awareness of enforcement actions taken by states, but indicate that this information is not accessible in a database (Regions 3, 4, and 5). Region 6 reports that the data is supposedly in the PCS, however it is not able to specifically identify Phase I construction cases.</p>

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What data do States track independently?	<p>Most Regions report that either some or all of the States have independent data systems to track information related to Phase I & Phase II storm water/construction activities (Regions 1, 3, 4, 5, 6, 8, and 9). Of these, three report that every State in the Region has its own data system (Regions 3, 4, and 8). Three Regions indicate that the State data systems record information on storm water permits, inspections, complaints, and enforcement (Regions 6, 8, and 9). Regions 7 and 10 are not aware of any such independent data systems at the State level. Region 2 indicates that information on Phase I storm water/construction activities should be entered into PCS, but is uncertain that the data are actually recorded in this way.</p>
Collaborations: How does OECA foster effective sharing of information and resources to leverage Regional and State resources?	
What role does OECA play in the Regions' storm water efforts, and what types of interactions do the Regions have with OECA?	<p>While many Regions say that OECA plays a positive role in their storm water programs, a few Regions would like to see changes in OECA's role.</p> <p>Several regions note that OECA plays a helpful role in their storm water efforts (Regions 1, 2, 3, 6, and 7). However, one Region notes that OECA has not been effective on policy (Region 8), and another Region notes that while the storm water enforcement workgroup has been very good, OECA often develops initiatives that are more burdensome than helpful (Region 10).</p> <p>While a few regions note that OECA was helpful by providing tools and ESO development (Regions 1, 2, and 3), the majority of regions note that OECA has played a particularly active role on large-scale national cases (Regions 1, 3, 4, 5, 7, 8, and 9).</p> <p>A few regions note that their view of OECA has improved since 2000 (Region 3, 6, and 9). One region believes this is due to the formalized network of contacts OECA has made available (Region 9).</p> <p>The most frequent interactions that Regions have with OECA include emails, conferences and regularly scheduled conference calls (all Regions except 10), as well as ad hoc phone calls (all Regions except 8). Regions also frequently cite training (Regions 1, 2, 3, 4, 5, 8, and 9), in person meetings (Regions 2, 3, 6, 8, and 9), and workgroup interactions (Regions 1, 2, 7, 8, 9, and 10).</p>

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**SUMMARY OF FINDINGS FROM EPA REGIONAL CONTACTS:
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Evaluation Question	Finding (Region)
What are key sources of information and support for Regions?	<p>OECA is a significant source of support for many Regions on technical issues, policy and guidance, staffing and funding, and enforcement support.</p> <p>Regions most frequently seek information and support on technical issues from the Office of Water (Regions 3, 4, 5, 6, 7, 8, and 9), although several Regions also turn to OECA for help on technical issues (Regions 1, 2, 4, 5, 7, and 8). Other sources of support for help on technical issues include staff within the Region itself (Region 1), the NOI processing center (Region 2), and other Regions (Region 1). One Region said staff were not sure who to call on for the types of technical support they needed (Region 10).</p> <p>Regions most frequently turn to OECA for information and support on policy and guidance (Regions 1, 2, 3, 4, 5, and 6), although the Office of Water is also a significant source of support for many Regions on policy and guidance (Regions 4, 5, 7, 8, 9, and 10). Other sources of support for policy and guidance include the Office of Regional Counsel (Region 8), the Office of General Counsel (Regions 8 and 9), and NPDES staff (Region 8).</p> <p>Most Regions also ask OECA for help with staffing and funding (Regions 1, 2, 3, 5, 7, 8, and 9), however two Regions turn to the Office of Water (Regions 5 and 9), and Region 6 relies on its own inspectors. One Region said staff were not sure who to call on for staffing and funding support (Region 10).</p> <p>All but one Region (Region 6) said they called on OECA first for enforcement support. Region 6 said they relied on their own inspectors instead of OECA. Region 5 said they relied on their Regional Counsel first, then on the Office of General Counsel in addition to OECA.</p>
What additional types of information and support do Regions need?	Regions most frequently cite money and resources as additional needed support (Regions 1, 2, 3, 5, 6, 7, 9, and 10). Regions note that the additional money and resources are needed for a variety of tasks including: travel for compliance assistance and training (Regions 5 and 6);

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Evaluation Question	Finding (Region)
	<p>additional training, specifically on BMPs (Region 2), P2 plans (Region 2), evaluating NOIs (Region 2), endangered species issues (Region 2), enforcement and inspections (Regions 2 and 6), and compliance assistance (Region 9); increased inspection coverage (Regions 1, 5, and 9); additional personnel to help answer phones and provide compliance assistance (Regions 6 and 10); and additional resources such as computers, badges, and uniforms (Region 6).</p> <p>Regions also request assistance with implementing state programs (Regions 4, 5, and 8). These regions note that OECA should help states develop core programs (Region 4), set expectations and policies for states (Regions 4 and 8), provide resources (Region 5), and provide inspector training for states (Regions 4 and 8).</p> <p>A few Regions note that OECA should update or finalize storm water materials (Regions 4, 7, 8, and 10) including the Inspection handbook (Region 4), the SNC definition (Region 4), the guidance and policy (Regions 4 and 7), the BMP construction manual (Regions 8 and 10), and the 1992 storm water sampling protocol (Region 10).</p> <p>Other Regions note the usefulness of the NOI database, but cite some areas for improvement (Regions 2 and 8). These improvements include fixing problems with the location of sites (Region 2) and increasing timeliness of permit approval postings (Region 8).</p>
Context: What factors are important in understanding the Region's responses	
<p>What are Current Regional Storm Water Strategies, and have they changed since 2000?</p>	<p>Regions tend to devise their strategies to get the "biggest bang for the buck". Such strategies include targeting large residential construction and high-growth areas (Regions 2, 4, 6, and 7), big box stores (Regions 2 and 6), developers with the worst violations (Region 7), highway construction (Region 2), and general construction activities (Regions 4, 7, and 8). Other Regions also focus or are planning to focus on a watershed or sector-based strategies (Regions 2, 3, 4, 7, and 9). A couple Regions focus on national cases (Regions 5 and 8), and one region focuses on areas without state authorization (Region 10).</p> <p>Some Regions have changed their strategies very little since 2000 (Regions 1, 2, and 10). Other</p>

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Evaluation Question	Finding (Region)
	Regions have put more emphasis on a watershed approach (Regions 3 and 9); focused more on Phase 1 construction (Region 4); increased work in the storm water realm (Regions 7 and 8); allowed states to take a more active role on inspections and enforcement (Region 6); and developed their enforcement operations (Region 5).
What are Resources (FTE allocations) for Storm Water Activities?	On average, Regions have 3.7 FTEs dedicated to storm water in 2004. In the eight Regions that have FTE estimates for years prior to 2004, four report increasing FTEs dedicated to storm water (Regions 1, 3, 7, and 9), three report level FTE allocations (Regions 4, 5, and 5), and one Region reports increasing FTE allocations up to 2003, followed by a decline (Region 8). While not every Region is able to break out 2004 FTE allocations for different types of activities related to storm water, on average, reporting Regions spent slightly more of their limited FTE allocations on enforcement (with an average of 1.3 FTEs), followed by compliance monitoring (0.99 FTEs), compliance assistance (0.89 FTEs), and state coordination (0.75 FTEs). No Regions report FTEs allocated to policy/tool development for storm water in 2004, although Region 1 reports 0.25 FTEs allocated to this activity in 2002 and 2003.
How does Construction Compare to Other Storm Water Priorities?	<p>With regard to compliance assistance activities related to storm water, Regions most often cited Phase I construction and MS4s as top priorities for their efforts. Phase I construction activities rank as a top Regional priority for compliance assistance and outreach for five Regions interviewed (Regions 2, 3, 4, 6, and 10). MS4s are also a top priority for compliance assistance for five Regions (Regions 1, 5, 6, 8, and 9). Small construction activities are a top priority for four Regions (Regions 3, 6, 7, and 10). Storm water from industrial activities are a top priority for Regions 3 and 6. No Regions cite watersheds of concern as a top priority for storm water compliance assistance efforts.</p> <p>With regard to compliance monitoring and enforcement activities, Regions most often cited Phase I construction as a top priority for their efforts. Seven Regions rank Phase I construction activities as a top priority for compliance monitoring and enforcement (Regions 1, 2, 4, 6, 8, 9, and 10). Small construction activities are cited as a top priority for three Regions (Regions 6, 7, and 10). MS4s are cited as a top priority by two Regions (Regions 5 and 6).</p>

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Evaluation Question	Finding (Region)
	Region 6 also cites storm water from industrial activities as a top priority, and Region 3 cites watersheds of concern as a top priority for compliance monitoring and enforcement.

Attachment G
Summary of Findings from State Contacts

Attachment G

**SUMMARY OF FINDINGS FROM SELECTED STATE CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
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Evaluation Question	Finding (State)
Levels of Compliance: What is the level of compliance with storm water regulations in the construction industry?	
What is the universe of regulated entities?	<p>Most States do not have information readily accessible on the number of construction entities subject to Phase I storm water requirements. Five states indicate that they were not able to distinguish between Phase I and II permittees after 2002 (AL, CA, GA, KS and MD). Only two States characterize the degree to which construction sites are participating in the permit system (CA¹ and GA). California notes that "virtually everyone submits an NOI," while Georgia estimates that there used to be a high rate of unpermitted sites (compliance with NOI requirements was less than 30 percent), but that a task force pilot with EPA increased the percentage of permitted construction sites.</p> <p>Several States work with local regulators in a systematic way to require construction site operators to apply for storm water construction permits. For example, in Colorado, MS4s are now requiring building inspectors to educate construction operators about their storm water requirements. In Georgia, some local governments require that a builder submit an NOI to the State before the local government will issue a building permit. In addition, all local governments provide the State with a list of building permits, and the State checks to make sure each site with a building permit has an NOI. Similarly, in certain municipalities in Kansas, the county does not issue a building permit unless the builder has a storm water permit, according to the State. In Maryland, some counties send the State a list of grading permits, which are used as a check to make sure each construction site has an NOI. Finally, in Washington, part of the county construction checklist includes the need to apply for a storm water permit.</p>

¹ California regulates construction storm water through several regional water boards. Given resource and time constraints for this evaluation, a representative from only of these regional boards, the Sacramento/Central Valley Regional Water Board, was interviewed. Therefore, findings that refer to "California" actually refer to the Sacramento/Central Valley Regional Water Board in California, and are not intended to represent the entire State.

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**SUMMARY OF FINDINGS FROM SELECTED STATE CONTACTS:
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Evaluation Question	Finding (State)
<p>What do we know about the level of compliance with storm water regulations in the construction industry, with and without enforcement?</p> <p>What methodology would help EPA get a handle on the State of compliance?</p> <p>Indicators of Compliance include:</p> <ul style="list-style-type: none"> • Number of permitted sites • Changes in permitting activity • Percentage of inspections that result in formal enforcement actions per year 	<p>In the majority of States interviewed, the number of permitted sites has been steadily increasing since 2001. Five States report increasing numbers of permit applications (increases range from 43 percent in Kansas from 2002-2004, to 250 percent in Alabama from 2000 to 2004).² But some of this increase reflects the addition of Phase II sites, since 2002 was the last year prior to implementation of the Phase II program. CA reports steady numbers of permit applications every year.). In 2004, States interviewed report a total of over 13,000 Notices of Intent (NOIs) submitted (some of these estimates include Phase II as well as Phase I sites). The majority of States interviewed report a corresponding increase in the number of Notices of Termination (NOTs) over the years for which data is readily available. Four States report increases in the number of NOTs per year (CO, KS, MD, and NV). One State reports no change in the number of NOTs (CA), and one State reports a decline in the number of NOTs from 2003 to 2004 (AL).</p> <p>Based on readily available data, the percentage of on-site compliance inspections that resulted in enforcement actions ranged from less than 1 percent (in Maryland in 2004), to 55 percent (in Alabama between 2000 and 2004). Note that the lack of data on enforcement actions or inspections may prevent these figures from accurately representing State activities. For the two States with sufficient data to track trends in the percentage of inspections that result in enforcement actions, this percentage declined from 2000 through 2003, and then rebounded in 2004 (AL and CA).</p> <p>We do not have information from Washington for this question.</p>

² While Georgia is not able to provide actual year-by-year data on NOIs, the interviewee believes that there was a substantial increase in the number of NOIs over the 2000-2004 period.

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Evaluation Question	Finding (State)
What is the nature of non-compliance? What types of violations are most commonly found?	<p>The violation States find most frequently is non-compliance with the Storm Water Pollution Prevention Plan (SWPPP). Four States report that the improper implementation of the SWPPP is the violation found most often (CA, GA, KS, and MD), while two States cite this as the second most common storm water violation (AL and NV). Not submitting a Notice of Intent (NOI) occurs more commonly than not submitting a Notice of Termination (NOT). No State reports either of these as one of the most common violations. By contrast, the improper maintenance of Best Management Practices (BMP) is cited as a most frequently found violation in two States, Alabama, and Georgia, but not in the others. We do not have information from Washington for this question.</p> <p>Most States have seen evidence of actual discharges of sediment off site as a result of storm water violations (AL, CA, GA, KS, MD, and NV). Three of these States report this as a frequent occurrence, with poor BMP selection and BMP maintenance offered as causes (AL, CA, and GA). As one of the States that sees less frequent violations of this nature, Maryland “never observes (this type of violation) without taking action.” We do not have information from Washington or Colorado for this question.</p>
What specific issues contribute to non-compliance?	<p>All States responding to this question cite issues with the selection, design, or maintenance of BMPs as an important issue contributing to non-compliance with storm water regulations in the construction industry (AL, CA, GA, MD, and NV). Three of the five respondents report adequacy of self inspection as an important factor in non-compliance (AL, GA, and NV). Two States also report that the improper sequencing of construction activities to minimize sediment is a factor contributing to non-compliance (AL and MD). We do not have information from Washington, Colorado, or Kansas for this question.</p>
What factors influence levels of compliance with storm water regulations in the construction industry (e.g., is cost a driver)?	<p>States rank the cost or difficulty of complying with requirements as the most important factor influencing levels of compliance. Insufficient enforcement presence is the second most important factor, followed by confusion about requirements. Four of the six States responding to this question indicate that lack of awareness of requirements is not a factor influencing storm water compliance (AL, KS, MD, and NV). We do not have information from Washington or Colorado for this question.</p>

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Evaluation Question	Finding (State)
Measuring Performance – To what extent do States review NOIs and SWPPPs submitted to assess their quality/completeness?	<p>All States responding indicate that they review Notices of Intent (NOI) to some extent. Alabama describes the most thorough review of all the States. By contrast, Georgia only reviews NOIs for the sites the State plans to inspect. Kansas indicates that NOI review is not particularly stringent and mostly consists of administrative review. We do not have information from Washington for this question.</p> <p>States do not require construction operators to submit SWPPPs to the State except in special circumstances. Alabama only requires SWPPPs to be submitted for sites in sensitive areas (e.g., near streambanks). The State will review the SWPPP and inform the operator of technical deficiencies that need to be fixed before the site can be registered. In Georgia, construction sites of 50 acres or more must submit an Erosion and Sedimentation and Pollution Control Plan (equivalent to the SWPPP). The State Soil and Water Conservation Commission reviews the plan for technical competency.</p>
<p>What do we know about what compliance assistance and enforcement tools or combination of tools cause compliance or return to compliance? What feedback to inspectors have after inspections?</p> <p>Is there a return to compliance with out assistance, monitoring, and/or enforcement, and if so what causes this return to compliance?</p>	<p>The most common insight about how to improve compliance with Phase I requirements is that States need a greater staff presence in the field (AL, CA, GA, and MD). Alabama notes that the regulated community prefers one-on-one compliance assistance, but does not wish to pay. The State also indicates that making the storm water laws tougher will not increase the level of compliance.] Nevada observes that a collaborative relationship with the regulated community results in compliance most of the time. We do not have information from Washington, Colorado, or Kansas for this question.</p> <p>Most States find that a combination of inspection, compliance assistance, and enforcement are important in improving storm water compliance (AL, CA, GA, MD, and NV). Three States point out how effective the threat of enforcement action can be, since contractors are very sensitive to the potential for negative publicity (AL, GA). Kansas indicates that it has insufficient program experience to recommend what tools are most helpful in improving compliance. We do not have information from Washington or Colorado for this question.</p>
Compliance Assistance: Are EPA’s compliance assistance materials being used? If so, how are they being used and are they effective?	
What are different ways in which compliance	State have a variety of delivery mechanisms for compliance assistance.

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Evaluation Question	Finding (State)
assistance is delivered?	<ul style="list-style-type: none"> • All States interviewed have a website (AL, CA, CO, GA, KS, MD, NV, and WA). In addition, most of these websites have information related to the Phase 1 storm water program (AL, CA, GA, MD, KS, NV, and WA). A few regions note that they do not link to the EPA website on storm water (AL, GA, and MD) while one State does link to the EPA construction storm water and CICA websites and notes that they find CICA useful (KS). • Five States send mailings (AL, CA, CO, GA, and NV). Mailings consist of fliers to advertise trainings (NV), annual bills and reminders to those with permits (CO), notice of new requirements (AL), information on current requirements (GA), and reminders to owners and operators that they need to come into compliance (CA). • Five States conduct on-site visits (AL, CO, GA, KS, and NV). Some visits are for both compliance assistance and monitoring inspections (CO and NV), and one State only makes on-site visits if there is a complaint (KS). • Seven States provide compliance assistance trainings through presentations, classes, and seminars (AL, CA, CO, GA, MD, NV, and WA). All States target the construction industry while two State also targets local agencies (AL, MD). • While States do not conduct their own conferences, 7/8 States do attend conferences sponsored by others (AL, CA, CO, GA, KS, MD, and WA). Conferences are typically targeted towards the construction sector and only a few include general storm water discussions (AL, CO, and GA). • Seven States hold meetings with the construction sector, including general contractors, construction operators, homebuilders and homebuilder associations, road builders, consultants, energy and utility associations, and military installations, (AL, CO, GA, KS, MD, NV, and WA). • Six States also hold meetings with other regulators such as State and county engineers, storm water associations, local governments, and regional or national EPA (AL, CA, GA, MD, NV, and WA). • One State (WA) makes public service announcements when there are enforcement penalties greater than \$10,000. • Four States publish articles in journals. Generally only 1 to a few articles are published in a year (CO, GA, KS, and WA).

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Evaluation Question	Finding (State)
Which kind of information delivery (websites, mailings, workshops, manuals) is most useful for works best for the construction industry in terms of getting information to the regulated community and improving compliance? Rank methods of delivery by effectiveness.	On-site visits (AL, CA, CO, GA, MD, NV, and WA) and compliance assistance training (AL, CO, GA, MD, KS, NV, and WA) are the most highly rated tools for getting information to the regulated community and improving compliance. Other tools that received high ratings from States include meetings with the sector (CO, GA, MD, and KS), meetings with regulators (MD and WA), and websites (CO and KS). While no formal statistical studies have been conducted at the State level, States do claim that their outreach improves compliance (CO, GA, NV, and WA). In addition, many States receive positive feedback on their outreach efforts (AL, CO, GA, MD, and NV).
Do we measure compliance assistance reach? If so, where/how? How accurate/complete are the data? Is the compliance assistance delivery reaching the regulated community?	Few States measure the reach of compliance assistance. Some States do have measures on the number of mailings distributed (CA and CO), number of attendees at particular trainings (NV), or number of inspections/site visits conducted (AL, CO, GA, and NV). However, in general, States do not consistently track the reach of their assistance, and therefore there is not sufficient data to assess extent to which compliance assistance from States is reaching the regulated community.
Are there suggestions from States about how compliance assistance outreach/ delivery of materials could be improved? Identify/propose more effective delivery methods. How can EPA partner better with the States to “get the word out” or provide other assistance needs?	The majority of States who respond note that the best way EPA could help support their delivery of compliance assistance and outreach is through providing money or more people to conduct inspections (AL, CA, GA, MD). Aside from providing more funding, a few States recommend various approaches to delivery of compliance assistance for Phase I storm water construction including: provide a consistent message to all States (AL), have an onsite presence (CA), maintain current website (KS), provide existing video material on concrete truck washout to all States (CO), and serve as a clearinghouse such that NOIs must be submitted before local government grants building permits (GA). We do not have information from Washington for this question.

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Evaluation Question	Finding (State)
<p>What specific compliance assistance materials are used? To what extent do States use compliance assistance materials prepared by EPA? Are there suggestions from States about how materials could be improved?</p>	<p>Most States distribute compliance assistance materials specific to the State and do not use OECA's compliance assistance materials (AL, CA, CO, GA, KS, and MD). State materials include: trainings (AL), handbooks and guidance documents (AL, CO, and MD), SWPPP checklists (CA), brochures (GA), and fact sheets (MD). These materials are geared towards various audiences within the construction sector including engineers, operators, inspectors, contractors, and developers (AL, CA, GA, MD). The most widely used delivery mechanism for compliance assistance materials is through State websites (AL, CA, GA, KS, and MD). Other methods include mailings (AL, CA, and MD) and direct contact with the sector (CA, GA, MD, and NV). Most States note that the feedback they receive on compliance assistance materials is positive (AL, GA, KS, and MD).</p> <p>States are familiar with many of the EPA materials, particularly the 1992 SWPPP guidance manual (CA, CO, KS, and MD), the "After the Storm" Brochure (CA, CO, KS, MD, and NV), and the storm water and construction industry poster (CA, KS, MD, and NV). While a few States do use one or two of EPA's materials, they are not widely used. Some States note that this is because the materials are not specific to the State (AL, CA, CO, and MD). We do not have information from Washington for this question.</p>
<p>What specific issues are addressed through compliance assistance materials? Which issues have been addressed most effectively by compliance assistance materials, and which issues would benefit from further compliance assistance efforts?</p>	<p>The issues most frequently addressed through compliance materials include: Availability of SWMMPs onsite; BMP selection, design and maintenance adequacy (AL, CA, GA, MD, and NV); SWMMP updating (AL, CA, MD, and NV); and adequacy of self-inspection (AL, GA, MD, and NV). States note that the issues dealt with most effectively through compliance assistance include: BMP selection, preparedness, and maintenance (CA and GA); NOI submissions (GA and NV); self inspections (GA and NV); SWPPPs (NV); and day-to-day operations (NV). We do not have information from Washington for this question.</p>

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Evaluation Question	Finding (State)
Compliance Monitoring: What is the level of compliance monitoring done by EPA?	
What compliance monitoring activities are measured? How accurate/complete are the data?	Most States have at least an estimate of the number of on-site compliance inspections conducted for construction storm water, but other types of compliance monitoring activities are tracked less often. Three States have readily available data on the number of on-site compliance inspections conducted per year (AL, CO, and MD), and two additional States provide estimates of the number of inspections conducted annually (CA and KS). Four States provide information on written information requests (AL, GA, KS, and MD). Three States are able to estimate the number of citizen complaints received per year (AL, CA, and KS), but only one of these States is able to provide specific data for each year (AL). Two States have information on voluntary disclosures (GA and KS), and one State is able to estimate the number of off-site record reviews (KS).
What are levels of monitoring, currently and over time?	Nearly 13,000 on-site compliance inspections were conducted in five States in 2004, an overall increase from the prior two years (AL, CA, CO, KS, and MD). The number of inspections conducted per State in 2004 ranges from a high of 8,777 in Maryland to a low of 24 in Kansas. The number of inspections conducted per year increased steadily over the reporting period for one State (AL), held steady for two States (CA and KS), and experienced an increase and then decline for two States (CO and MD).
Do States and EPA share compliance monitoring work? If so, how?	The majority of States have some experience of sharing compliance monitoring work with EPA (CA, CO, GA, MD, and NV). In some cases this work sharing is collaborative, and in others it takes the form of oversight. Three States mention having experienced joint inspections with EPA Regional staff (CA, CO, and NV), and an additional State says that joint inspections are anticipated in the future (AL). Alabama says that joint inspections are welcome, but only if the State takes the lead. Colorado comments that the Region's involvement has appeared to be overseeing the State rather than providing assistance with inspections.

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Evaluation Question	Finding (State)
<p>What criteria are being used by States for targeting inspections?</p> <p>Do the criteria appear to affect the types of violations found?</p>	<p>States use a variety of different targeting strategies, although focusing on citizen complaints and tips from local regulators is the most common strategy for selecting which sites to inspect (KS, MD, and NV). One State that prioritizes citizen complaints also targets inspections based on known violations and possibility of environmental harm (MD). Another State focuses on specific geographic areas, such as targeting an entire county or watershed (AL). Another State focuses on areas with poor soils and rapid growth (CA). Finally, one State says that while it generally does not target inspections, it has focused on large developers as a consequence of EPA's enforcement strategy (GA).</p>
<p>Do States provide compliance assistance during inspections?</p>	<p>All States responding to this question provide compliance assistance during inspections (AL, CA, CO, GA, KS, MD, and NV). Perspectives on the importance of offering compliance assistance vary. For example, Georgia says that the primary purpose of their inspections are enforcement, but that they will give the operator limited information on how to comply. In contrast, Nevada sees compliance assistance as the primary focus of their activities. California notes that whether the inspector provides compliance assistance may depend on-site conditions. For example, if it is raining during an inspection, and if due to the rain the inspector observes sediment flowing off-site, then the inspector will take an enforcement action rather than providing compliance assistance. Kansas comments that it often takes several follow up activities (e.g., three letters, three inspections, and over 12 phone calls) in order to get a response to problems found at a site.</p>
<p>Do States conduct exit interviews?</p>	<p>All but one State responding to this question provide exit interviews, except when the operator is not on-site. The one State that does not typically provide exit interviews comments that this is because suitable personnel are not usually available on-site (KS). Some States provide detailed feedback on inspection results (MD and NV), while others provide a short closing conference (CA).</p>

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Evaluation Question	Finding (State)
Enforcement: How is enforcement being conducted in this sector and is it effective?	
How do States determine the appropriate enforcement response to violations at the site?	<p>Most States use a systematic method to determine the appropriate response based on potential or actual environmental harm at the site. For example, Alabama focuses on whether the operator has performed on the ground. In Alabama, each inspector and office decides what's appropriate, but the State works very hard to maintain consistency across districts. Georgia assigns a monetary value for each specific violation or impact, and the State makes sure to take an enforcement action if BMPs are not maintained, resulting in silt in streams. Maryland has a menu of enforcement actions that ranges from allowing operators to fix the problem to formal legal actions. Factors that determine which enforcement action the State will take include environmental harm, willfulness, and recalcitrance. California follows a State-wide enforcement policy, and notes that NOVs are particularly effective in getting operators into compliance. Nevada has a 3-strike rule, which requires a verbal warning of a violation, a written warning, and then enforcement. If there is immediate endangerment to the environment, Nevada can shut down the site (the State has exercised this option about five times).</p> <p>Kansas did not mention a systematic approach to determining enforcement responses, but instead said that individual inspectors determine the appropriate response. Colorado focuses on providing assistance and referring an operator to educational resources to improve compliance.</p>
What enforcement actions are measured? How accurate/complete are the data? Distinguish between informal and formal enforcement actions, and break out ESOs.	<p>Most States do not have readily available information on the number of specific types of enforcement actions taken for storm water construction. Relatively more information is available for Administrative Penalty Orders (APOs), which are tracked in at least one year by four States (AL, CA, KS, and MD). Two States have readily available data on Notices of Violation (NOVs) (CA and CO). California is the only State with readily available data on informal actions, Administrative Orders (AOs), civil judicial referrals, and criminal referrals. No States track AO/APOs or Expedited Settlement Offers (ESOs). Alabama provides data on the total number of enforcement actions for 2000 through 2004.</p>

Attachment G

**SUMMARY OF FINDINGS FROM SELECTED STATE CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (State)
What are levels of enforcement? Distinguish between informal and formal enforcement actions, and break out ESOs. What are types of enforcement actions taken, trends for each type of enforcement action over time, and comparison across regions.	The total number of enforcement actions varies widely by State, and in general has increased after 2002. Alabama reports a total of 2,251 enforcement actions in 2004. The total number of enforcement actions in Alabama declined slightly from 2000 to 2001, and then rose steadily thereafter. Increases between 2002 and 2004 partly reflect the inclusion of Phase II sites. California (the Sacramento/Central Valley Region) reported a total of 145 enforcement actions in 2004 for Phase I and II construction activities. The total number of enforcement actions fell in California from 2000 through 2002, and then rose steadily thereafter. Maryland reports 29 total enforcement actions, and Colorado reports six. Kansas reports only one enforcement action, based on readily available data.
Are enforcement outcomes measured? If so, how are they measured? Are there additional outcomes from enforcement that could be measured?	Most States that respond to this question do not measure enforcement outcomes (AL, CA, GA, KS, and NV). Maryland is unique in measuring enforcement outcomes. Maryland tracks enforcement through the percentage of sites inspected in significant compliance.
Are there data on citizen complaints? If so, how accurate/complete are the data? Are there observable trends in citizen complaints over time?	States do not have readily available data on the specific number of citizen complaints related to Phase I storm water construction, although AL has data primarily for Phase I construction through 2002 and primarily for Phase I and II construction combined for 2003 and later.
Collaborations: How does OECA foster effective sharing of information and resources to leverage State resources?	
What role does OECA play in the State's storm water efforts? What types of interactions do the States have with OECA?	<p>The States' relationships with EPA can be categorized into the following groups: 1) strong collaboration 2) minimal collaboration and 3) poor collaboration/ communication. In the first group, Alabama, Georgia, and Maryland indicate that the EPA Regions have been helpful. California and Washington both indicate a minimal level of collaboration between the State and EPA Region. Colorado, Kansas, and Nevada report that the EPA Region has acted to a greater degree in an oversight role than in a collaborative one with the State. A few States have concerns about what they see as heavy-handed oversight exercised by EPA Regions (CO and NV).</p> <p>Most States, with the exceptions of California and Washington, report interacting with EPA on issues related to Phase I storm water/construction activities through ad hoc phone calls and</p>

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**SUMMARY OF FINDINGS FROM SELECTED STATE CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (State)
	<p>emails. Alabama and Maryland indicate the frequent occurrence of phone calls with the EPA. Kansas indicates that EPA communicates "principally requesting information that the State does not have." In person meetings with the EPA are cited by five States, including California and Washington, which report the least collaboration with the EPA. California reports that "routine roundtable meetings are occasionally held with the Regional office." Conferences and trainings are cited by three States each.</p> <p>Two States (AL and MD) cite the EPA Regions' direct involvement in investigating major construction contractors as their most important interactions with the EPA regarding Phase I storm water construction issues. Georgia points out the contribution of resources by the EPA Region in its effort to conduct a pilot for the Phase I General Permit. Colorado highlights the important function of national storm water conferences and other EPA trainings.</p>
<p>What are key sources of information and support for States?</p>	<p>States operate largely independently in some areas, but some States rely on EPA support for policy and guidance and enforcement support. Five States do not contact the EPA Regions for technical information nor for staffing or funding (AL, CA, GA, KS, and WA). Half of the States interviewed communicate with EPA Regions for policy and guidance (AL, CO, MD, and NV) and for enforcement support (AL, GA, MD, and NV). Only Nevada and Maryland receive support for all four issues.</p> <p>States that contact the EPA offices for support on Phase I storm water construction issues tend to only communicate with a single department. For example, the Regional Enforcement office serves all of Maryland's support needs (i.e., technical information, policy and guidance, staffing or funding, and enforcement). Similarly, the Regional Office of Water serves all of Nevada's support needs.</p>

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**SUMMARY OF FINDINGS FROM SELECTED STATE CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (State)
What additional types of information and support do States need from EPA?	<p>Most States claim not to have needed EPA support in the past for Phase I storm water/construction issues (CA, CO, KS, MD, NV, and WA). Colorado reports relying on other States on storm water questions, while Washington indicates that it does not have enough contact "to know what they have to offer or who at EPA to call." Only Alabama and Georgia report having used EPA support in the past. Alabama reports that EPA was slow to provide technical assistance as the State tried to upload data from the AL data system to PCS.</p> <p>States have several requests for how EPA could improve support of their efforts on construction storm water, including financial support, timely feedback, advance planning, and technical support. California, Colorado, and Georgia indicate that EPA could provide more financial resources to the storm water program. Three other States recommend a change in EPA's role in the storm water program. Alabama seeks more timely, reliable, and consistent responses from the EPA Region. Colorado suggests that the Region provide the State with the National EPA goals earlier in the year, so that these can be factored into the State's planning. Two States, Maryland and Colorado, identify improved technical support (for ICIS, PCS, and web) as needs. Nevada seeks a greater degree of independence from Region 9 in running the storm water program, so as to expedite the decision-making process.</p>
Data availability/sharing	
What data do States share with EPA?	<p>Most States report that they deliver regular reports on storm water construction activities to their EPA Region (AL, CO, GA, MD, NV, and WA). Of this group, five States share data on inspections (AL, CO, GA, MD, and NV) and three States share information on enforcement activities (AL, GA, and NV). Alabama and Maryland both cite the 106 workplan agreement as an impetus for data sharing with EPA. Along with its report, Washington sends its State database on storm water construction activities to be incorporated into the PCS database. Colorado does not share inspection and compliance tracking data in its report to the Region.</p> <p>Neither California nor Kansas claim to send regular reports on Phase I storm water construction activities to the EPA. California claims to share inspection information for corporate enforcement cases. Through its website, Kansas publicly shares information on construction permit applications, which have been submitted by the regulated community.</p>

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**SUMMARY OF FINDINGS FROM SELECTED STATE CONTACTS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (State)
What data do States track independently?	<p>Most States have at least one independent data system to track information related to Phase I storm water/construction activities (AL, CA, CO, MD, NV, and WA). These States do not use a single, standardized program, but rather employ in-house data systems to track inspections, enforcement, NOIs, and other information. Three of these States use multiple data systems to keep track of Phase I storm water/construction activities (CA, CO, and MD). Two States do not currently have data systems to track Phase I storm water/ construction activities. Georgia plans to have a central database in place by November 2004. Several states combine data for Phases I and II in at least some years. For example, KS, MD, GA, and AL combine Phase I and II after 2002. In MD, some data points include construction sites as small as 5,000 square feet for the entire evaluation period, while others combine Phase I & II sites after 2002.</p> <p>Most States do not formally keep track of Phase I storm water compliance assistance (AL, CA, CO, KS, and WA). For example, Kansas reports that it keeps track of this information through “manila folders and memory.” Georgia, Maryland, and Nevada are the only States that claim to track compliance assistance numbers. The States vary widely in what they consider to be compliance assistance. Maryland only counts cases where it has gone back to verify that a site has corrected its compliance problem following an initial inspection. Similarly, Nevada keeps track of the numbers for on-site compliance assistance, but these numbers do not verify that the problems have been fixed. Georgia tracks compliance assistance as the number of developers that participate in seminars and in the Small Business program. The State stores information from this latter program in a database, but does not share any of this compliance assistance data with EPA. The other States do not indicate whether compliance assistance data is shared with EPA.</p> <p>Half of the States currently track Phase I storm water monitoring and enforcement activities by entering this information into a database (AL, CA, MD, and NV). In addition, Georgia is in the process of developing a State database to aggregate data that is collected at the district level. Kansas has begun converting storm water monitoring and enforcement information from folders into spreadsheets. Colorado and Washington do not indicate how the State keeps track of Phase I storm water monitoring and enforcement activities. Alabama is the</p>

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STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (State)
	only State to describe a data verification system in which higher level managers review an inspection report before it is entered into the data system. By contrast, inspectors in Georgia enter monitoring and enforcement information directly into the State database from the inspection site. Most States do not report sharing Phase I storm water monitoring and enforcement data with EPA, with the exceptions of Georgia and Maryland. As above, several states combine data for Phases I and II in at least some years.

Attachment H
Summary of Findings from Industry Contacts

Attachment H

SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
<p>What is your organization's approach for addressing environmental regulations related to storm water?</p> <p>Has there been any change in this strategy since 2000?</p>	<p>All five organizations use considerable resources in addressing environmental regulations related to storm water. Two organizations emphasize staff training in storm water compliance (NAHB and one of the contractors). Two of the construction companies have added staff and hired outside consultants to oversee compliance with environmental regulations. The two trade groups provide comprehensive, up-to-date compliance assistance materials to their members. In addition, NAHB reports that it actively participates in the development of regulations with EPA and States.</p> <p>Four organizations have changed strategy since 2000 in addressing storm water regulations (AGC and three contractors). Choice Homes reports a dramatic increase in compliance since 2000, owed to the implementation of a computerized compliance system. Over this period, another contractor added more in-house regional compliance managers and has provided increased assistance and guidance from the corporate level. AGC notes that the creation of a national construction workgroup and EPA's commitment to CICA have led to a change in the organization's strategy. Another contractor notes that while violations were non-existent in their State five years ago, today the State has quotas to meet on inspections, which has forced changes on the company's operations.</p> <p>By contrast, NAHB reports that it has always had an educational program, which ebbs and flows with enforcement action.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
<p>Are there any major barriers to getting information on storm water management requirements to those responsible for planning and/or managing construction sites (e.g., operators)?</p> <p>Do you have any suggestions for bringing non-filing operators into the system?</p>	<p>Most organizations indicate that major barriers exist in getting information on storm water management requirements to construction site managers (AGC, NAHB and two contractors). Of this group, three report that information is not getting to a broad enough audience, partially due to the fact that many construction “field people” do not have Internet access (AGC, NAHB, and one of the contractors). One contractor also notes that significant confusion exists about how often maintenance is required, when stabilization is necessary, and what constitutes a common plan of development. AGC reports that contractors falsely perceive that obtaining local permit status satisfies all State and EPA requirements. Another contractor notes that a major barrier in obtaining information on requirements is the perception among contractors that EPA masks visits as compliance assistance. By contrast, Choice Homes reports that there are no barriers to getting information on storm water management requirements.</p> <p>NAHB suggests that the construction industry is very responsive if EPA or States conduct education or outreach that builds a relationship between the agency staff and contractors. The other organizations do not offer suggestions for bringing non-filing operators into the system.</p>
<p>Are there any barriers for design engineers in selecting new or innovative BMP technologies – that might be more effective from an environmental and/or cost perspective – for storm water management at a construction site?</p>	<p>Three organizations report barriers for design engineers in selecting new BMP technologies for storm water management at a construction site (AGC, NAHB, and one of the contractors). Of these, two organizations indicate that local communities often regulate the type of storm water controls used, thus limiting BMP options (NAHB and one of the contractors). Both also note that many inspectors are unfamiliar with the most innovative BMPs, which leads to disagreements about effectiveness. AGC reports that engineers might be reluctant to try new BMP technology that they perceive as unproven. Choice Homes indicate that most engineers are “locked into” silt fences, which it describes as one of the most difficult BMPs to maintain and really be effective. We do not have information from the the other contractor for this question.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
<p>Do you have any data regarding the percentage of a site's construction costs that are dedicated to compliance with environmental regulations, or specifically for compliance with storm water requirements?</p> <p>If possible, describe the areas that you believe present the greatest opportunities for reducing costs associated with compliance with storm water requirements.</p>	<p>Two organizations provide data. NAHB reports that the BMP cost is 3% for small sites and 1% for larger sites. According to Choice Homes, compliance costs vary from location to location, estimating a range of ½% to 2% of a construction site's cost. AGC and one contractor comment that compliance costs vary widely by location.</p> <p>NAHB suggests that lowering the cost of paperwork could most effectively reduce compliance costs. Choice Homes comments that overall costs could be reduced if the original developer put in more retention basins and other related structures.</p>
<p>When you or members of your Association need support on Phase I storm water construction issues, what sources of support are they most likely to turn to for information?</p>	<p>Three organizations turn to consultants for technical or compliance information (NAHB and two of the contractors). Of these, two also rely on engineers for technical guidance (NAHB and one of the contractors). NAHB reports that it sometimes contacts state and local governments for information. One contractor reports that the EPA Regional staff declined to provide assistance on a storm water plan. Similarly, another contractor notes that federal and state entities are not contacted, and that occasionally local governments will be contacted for assistance. This company also indicates that TCEQ provides a very useful small business assistance hotline. We do not have information from AGC for this question.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
<p>Are there other types of assistance you or your members have needed on Phase I storm water/ construction issues?</p>	<p>Two organizations point out the need for more guidance to understand the complex, ever-changing storm water construction requirements (NAHB and one of the contractors). NAHB emphasizes the need for a basic clear guidance form from the agency, along with a compliance check list and fact sheet. The contractor would like to see EPA create a subscription service that would keep contractors informed of new issues in their area of interest. Choice Homes indicates that it needed compliance assistance in the development of its computer program. Another contractor remarks that it has only needed assistance on technical and compliance questions. AGC does not provide an answer to the question.</p>
<p>Do you or your members regularly interact with EPA on storm water requirements? If so, how did you obtain the information, and</p> <ul style="list-style-type: none"> • How do they interface (<i>e.g.</i>, meetings, conferences, inspections, etc.)? • Have interactions changed since 2000? 	<p>Three organizations report that interactions with the EPA are infrequent (AGC and two contractors). AGC notes that its members are very hesitant to contact EPA because the only interaction they have had with the agency is during an inspection. Both one of the contractors and AGC indicate that these inspections rarely include a closing conference.</p> <p>By contrast, over the past 6 years another contractor has taken every opportunity to meet with EPA in the effort to gather information and reach compliance. NAHB remarks that it is uncertain how frequently its members interface with EPA.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
Do you have any suggestions about how EPA could provide better support to you or your members to promote compliance with Phase I storm water/construction requirements?	<p>Two organizations suggest that the construction industry would benefit from on-site compliance assistance (AGC and one of the contractors). The contractor offers the following suggestions:</p> <ol style="list-style-type: none"> 1. Write less vague regulations. Current regulations leave much room for interpretation, which results in inconsistency between inspectors. 2. Provide written guidance and written interpretations. 3. Take the time to understand state requirements and how they differ from EPA's general permit. 4. Have a national clearinghouse for BMPs. 5. Develop consistency between federal, state, and local requirements. 6. Have a consultation service like OSHA. 7. Simplify the program and move towards local regulations – one size does not fit all. 8. Develop a confidential hot line to obtain answers without a fear of enforcement. 9. Recognize different industries have different storm water problems. 10. Recognize that the storm water program is now a state not a federal program and work with states to understand their program and help the states in implementing their program. <p>NAHB suggests that industry would benefit from more education and outreach from EPA.</p>
Do you maintain information on your organization's website related to the Phase I Storm Water program?	<p>Two contractors maintain information on internal websites related to the Phase I Storm Water Program. NAHB remarks that its website is not the first place that members turn to for information. Another contractor reports that it does not have information on its website that addresses storm water. AGC does not answer the question.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
<p>What outreach methods have you used, and what information resources have you informed your membership about, since 2000 to help your members understand their storm water discharge requirements?</p> <p>Is there a cost associated with the different types of training? If so, which kinds of training?</p>	<p>NAHB reports that it has used the following outreach methods since 2000: trainings, books, videos, and Environmental Issues Committee meetings.</p> <p>AGC charges members for training sessions, but provides the following training materials for free: newsletter, website, E-forum, and FAQs. NAHB does not indicate whether it charges for training.</p> <p>The construction companies were not asked these questions.</p>
<p>Have you gotten any feedback on your outreach efforts? If so, what comments have you heard?</p>	<p>Member contractors inform AGC of their preference for Regional seminars. They also comment that the newsletter helpfully simplifies difficult material and makes it easy to understand. NAHB notes that it has not taken any surveys to get feedback from members.</p> <p>The construction companies were not asked these questions.</p>
<p>Have you conducted follow up to determine if your outreach efforts have improved compliance with Phase I requirements?</p>	<p>AGC believes that these outreach efforts make a difference, but does not have any statistics to support this. NAHB has not conducted any follow up on this.</p> <p>The construction companies were not asked these questions.</p>
<p>What do you or your members see as the greatest compliance concerns?</p>	<p>The two industry groups indicate that the complexity of program requirements is the greatest compliance concern of their members. Irresponsible developers are the greatest compliance concern of Choice Homes. According to one contractor, the most critical compliance issue is the inconsistent interpretation between Federal, State, and local regulations. This company also comments that there is an overemphasis on paperwork, too much vagueness in the regulations, and a failure of inspectors to understand the regulations they enforce.</p>

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**SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (INDUSTRY)
<p>On which issues have you received materials from EPA? Have you distributed compliance assistance materials that specifically address any of these issues? If so, please identify whether it was found in materials developed by you or EPA.</p> <p>Which of these issues have been dealt with most effectively by compliance assistance materials?</p>	<p>The two industry groups have received materials from EPA on the Sequencing of Construction Activities to Minimize Sediment. NAHB reports that more than half of all State permits have requirements about Endangered Species/Critical Habitat. Two construction companies report that EPA has not supplied them with information on these issues. Another contractor notes that this information is all available on EPA's website and in the Construction General Permit (CGP).</p> <p>NAHB indicates that the MYER guide (Managing your Environmental Responsibilities) will address some of these issues. One contractor remarks that none of these issues has been effectively dealt with by the compliance assistance materials. None of the other organizations provides an answer.</p>
<p>What types of compliance assistance are most frequently requested?</p>	<p>NAHB indicates that the most frequently requested compliance assistance materials are the following: model SWPPPs, compliance checklist, and SWPPP implementation. AGC does not provide an answer.</p> <p>The construction companies were not asked this questions.</p>
<p>Are additional compliance assistance materials or services needed for any of the issues listed above? Which issues would you say are the highest priority for needing compliance assistance?</p>	<p>We do not have information from AGC or NAHB for this question. One of the contractors reiterates that it would be helpful for those in the construction industry to receive correct and timely written guidance on these issues or for hands-on programs to be offered.</p> <p>Choice Homes comments that most contractors will have a third party expert prepare SWPPPs.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
Please describe any State or local industry association approaches to compliance assistance that your members found particularly helpful.	Two organizations indicate that the TCEQ on-site program has been a helpful approach (AGC and Choice Homes). NAHB remarks that hands-on training has been the most helpful approach. One contractor remarks that public forums with regulators are not usually characterized by effective dialogue. Another contractor notes that the state industry association has been able to effectively work with the State agency to simplify the program.
Do you have ideas about how EPA could improve delivery of compliance assistance and outreach to Phase I construction sites to you or your members?	<p>The three construction companies offer differing ideas on how EPA could improve delivery of compliance assistance and outreach to Phase I construction sites. One company indicates that EPA should disseminate information through MS4s, so that all types of building permits would be available in one place. Another company suggests that EPA start a dialogue with the industry on how to develop an adequate compliance assistance program.</p> <p>By contrast, Choice Homes comments that the delivery of compliance assistance and outreach is not the EPA's role and should be taken over by the States. We do not have information from the trade groups on this question.</p>
Are any private or regulatory entities using approaches to delivery of compliance assistance or compliance assistance information for Phase 1 storm water construction that you believe would be useful for EPA for its own use or for broader dissemination to States or local government agencies?	Two construction companies provide examples of approaches to deliver compliance assistance for Phase I storm water construction. One contractor highlights the progress made by the industry group NAHB working collaboratively with the State agency. Choice Homes describes how the local storm water authority in Dallas is clearly divided into education and enforcement sections. The enforcement group only becomes involved if the education group determines a continued level of non-compliance following inspection. We do not have information from AGC, NAHB, and the other contractor for this question.

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**SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (INDUSTRY)
How often do EPA inspectors provide compliance assistance during the course of an on-site Phase I storm water construction compliance inspection? If possible, provide data to support your response (dates, geographic location).	The industry groups do not have sufficient information about their members to provide a response. The construction companies all comment that EPA inspectors do not provide compliance assistance during the course of an on-site Phase I storm water construction compliance inspection. One contractor adds that although the inspectors provide no assistance, the state small business technical assistance program does offer help. This company also remarks that local storm water officials are somewhat helpful.
After you or your members have been inspected by EPA, what types of communication (including closing conferences) have they told you they receive? Please describe the substance of the information typically conveyed. From whom is the communication received and when? If possible, provide data to support your response.	<p>The industry groups do not respond to these questions. The construction companies vary in their types of communication with the EPA following an inspection. One company reports that it has never had a closing conference nor has ever had the opportunity to discuss findings with the inspector. Another contractor indicates that EPA rarely conducts a closing conference and that typically EPA sends a letter months later describing alleged deficiencies.</p> <p>By contrast, Choice Homes reports that EPA always follows an inspection with a closing conference.</p>

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
Based on your members' experience in complying with Phase I storm water construction requirements, how do you believe construction contractors would rank the reasons for being in compliance?	Four organizations cite the likelihood of inspection and possible fines as an important reason for being in compliance with Phase I storm water construction requirements (AGC and all three contractors). Three of these also cite company practice or standard and legal requirement as important reasons (AGC and two of the contractors). AGC and one of the contractors comment that all of the listed factors enter into the companies' desire to be in compliance, but it is impossible to rank these (company practice or standard, responsible member of the community, legal requirement, interest in protecting the environment, likelihood of inspection and possible fines). One contractor indicates that the fear of going out of business is a very important reason for the company's compliance. We do not have information from NAHB for this question.
Based on members' feedback, how would you rank the potential non-compliance events at a construction site (where 1 is the most likely event, and 5 is the least likely event) Have the types of non-compliance events changed since 2000? If so, please describe how they have changed.	The three construction companies rank not developing a complete or sufficient SWPPP as a common non-compliance event. AGC indicates that none of these potential events is likely, while NAHB does not speculate a response. Choice Homes remarks that EPA has upped the standards for non-compliance since 2000, particularly with regard to SWPPPs and inspection reports. AGC comments that the percent of NOIs filed has gone up, with less attention being focused on NOTs. One contractor is the only organization to comment that the types of non-compliance events have not changed since 2000. We do not have information from NAHB and another contractor for this question.

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SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS: STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES

Evaluation Question	Finding (INDUSTRY)
<p>Based on you or your members' experience in complying with Phase I construction storm water requirements, how do you believe your members would rate the barriers to compliance (where 1 is very important, and 5 is not important).</p> <ul style="list-style-type: none"> • Lack of awareness that there are requirements • Confusion about what the requirements are • Perceived cost or difficulty of complying with requirements • Other factors 	<p>Three organizations indicate that the confusion about requirements is the most important factor serving as a barrier to compliance (AGC and two contractors). Three organizations rank the perceived cost or difficulty of complying with requirements as an important factor (AGC and two contractors). Two organizations rank the lack of awareness that there are requirements as an important factor (AGC and one of the contractors). One contractor is the only organization to rate all three factors as most important. According to another contractor, another important factor is inconsistent interpretations of the requirements between Federal, State, and local regulations. We do not have information from NAHB for this question.</p>
<p>What tools or combination of tools (including monitoring, enforcement, and compliance assistance/ outreach tools) do you think are most helpful in improving compliance?</p>	<p>Four organizations indicate that a cooperative relationship between inspectors and site operators would be the most effective tool in improving compliance (AGC, NAHB, and two of the contractors). One contractor suggests that a consultant who is not a Federal or State employee should be hired to inform site operators of the target requirements. Choice recommends that building inspectors should also be in charge of storm water inspections. Another contractor suggests the following combination of tools for improving compliance: better regulations (more specific and defined), model plans (examples that EPA could put out, or training), clearinghouse for BMPs (approved method that EPA would go through), appropriate audit policy, and clear written guidance.</p>

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**SUMMARY OF FINDINGS FROM INDUSTRIES AND CONTRACTORS:
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (INDUSTRY)
Have you or your members been offered the Expedited Settlement Offer (ESO) for Phase I violations in your Region?	Three of the organizations are familiar with the requirements of ESO (AGC, NAHB, and Choice). All three remark that the ESO program is a good concept. While it is familiar with ESO requirements, Choice Homes reports that it is not eligible for the program since it was penalized for a violation early on in the program. Similarly, AGC points out that in order to be eligible for ESO, a construction company must never have committed a violation in the past. Neither of the other two construction companies has been offered the ESO.

Attachment I
Summary of Findings from Environmental Non-Governmental Organizations

Attachment I

**SUMMARY OF FINDINGS FROM ENVIRONMENTAL NON-GOVERNMENTAL ORGANIZATIONS (NGOs):
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (NGO)
What is your organization's perspective on the importance of storm water pollution from construction sites as compared to other sources of storm water pollution?	All three NGOs understand the importance of storm water pollution from construction sites, but Peer is the only one to emphasize this as the largest source of storm water pollution. By contrast, CLF pursues a broad-based storm water advocacy, focusing on the water quality 303d list and permit requirements of the act. EIG attempts to "parse out construction data" from State 305b reports and EPA's national assessment for Region 5.
Have you used any information that EPA has developed about storm water from construction sites? For each material, did you find it useful, and do you have suggestions about how to improve it? Are there topics related to storm water construction where you would like more information from EPA?	<p>Two NGOs report using information that EPA has developed about storm water from construction sites (EIG and CLF). EIG indicates that it has found a lot of general information from the EPA, but had to specially request that Region 5 generate data from the PCS about the number of permits. CLF reports that it has used information from the EPA specific to storm water from construction sites, but primarily uses the Phase II storm water preamble and the Publications page on the NPDES storm water website.</p> <p>Peer and CLF would both like EPA to establish numeric baseline values of storm water discharges from construction sites. EIG suggests that EPA improve its data reporting, pointing out that numbers of permits reported by EPA Region 5 were not at all close to the number of permits reported by the States.</p>

Attachment I

**SUMMARY OF FINDINGS FROM ENVIRONMENTAL NON-GOVERNMENTAL ORGANIZATIONS (NGOs):
STORM WATER COMPLIANCE AND ENFORCEMENT PROGRAM
FOR PHASE I STORM WATER CONSTRUCTION ACTIVITIES**

Evaluation Question	Finding (NGO)
<p>What is your view about the degree to which the construction industry in your area complies with these requirements?</p> <p>Comparing the year 2000 to now, do you think that storm water pollution from construction sites in your area has increased or decreased? On what do you base your opinion?</p> <p>Where do you see the greatest compliance concerns?</p>	<p>Two NGOs, Peer and EIG, report a low level of compliance with the requirements. Peer estimates that 80% of sites are out of compliance in some regard, noting that in many cases a construction site will have a visible form of storm water control that either serves no purpose or makes the problem worse. EIG blames non-compliance on the fact that regulators at the Regional and State levels treat the issue as one of non-point source pollution, which makes the requirements seem unenforceable. CLF reports that there are many construction sites where the operators are not aware of storm water requirements.</p> <p>None of the NGOs reports that storm water pollution from construction sites has decreased since 2000. Peer reports a greater awareness of the requirements, but no notable improvements. EIG is still seeing many newly impaired river segments, especially in high growth areas. CLF reports that while Phase I storm water pollution has increased since 2000, the rollout of Phase II increased awareness of the whole program.</p> <p>Peer reports compliance concerns across the entire spectrum of the storm water program. EIG's greatest concern is the lack of review and enforcement of SWPPPs, citing that these are not as accessible to the public as a permit would be. We do not have information from CLF for this question.</p>

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Evaluation Question	Finding (NGO)
<p>Based on your experience, how would you rate the following factors as barriers to compliance:</p> <ul style="list-style-type: none"> • Lack of awareness that there are requirements • Confusion about what the requirements are • Perceived cost or difficulty of complying with requirements • Other factors 	<p>Two NGOs report that the lack of objective, enforceable permit standards is the most important barrier to compliance (Peer and EIG). Peer and EIG indicate that confusion about requirements and the perceived cost of compliance are somewhat important barriers to compliance. While Peer notes that the lack of awareness that there are requirements is a somewhat important barrier, EIG reports that this is not a very important issue at all. We do not have information from CLF for this question.</p>
<p>What do you do with information regarding potential noncompliance with storm water requirements at construction sites? Do you contact anyone; and if so, who?</p>	<p>Peer uses information regarding potential noncompliance with storm water requirements at construction sites in one of the following ways:</p> <ul style="list-style-type: none"> • filing a complaint with the State • passing the information to other groups (e.g. citizens') that might bring legal action • contacting the newspaper • publicizing photos on the group's website. <p>By contrast, EIG claims that its organization does not focus on site-specific compliance. We do not have information from CLF for this question.</p>
<p>Do you have any interactions with regulators with regard to storm water from construction sites? What is the nature of your interactions? If possible, please distinguish between interactions you have with local vs. state vs. federal regulators.</p>	<p>Peer and EIG report regular interactions at the State level with regard to storm water from construction sites. Peer notes that regulators in the lower ranks of the agency are sympathetic to the group's efforts and are frustrated by the inability to deny permits. EIG indicates that the state Staff is very helpful and provides much more information than Region 5 does. We do not have information from CLF for this question.</p>

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Evaluation Question	Finding (NGO)
Do you have any interactions with the construction industry with regard to storm water from construction sites? What is the nature of your interactions? If possible, please distinguish between interactions you have with individual companies vs. trade associations.	None of the NGOs reports regular interactions with the construction industry. Peer indicates that its interaction with industry is limited to the courtroom, public forums, and State certification training seminars. EIG indicates that it has no interaction with the construction industry. We do not have information from CLF for this question.
Do you have any suggestions about what steps you think the EPA should take to improve compliance with the construction storm water requirements?	Peer suggests that EPA enact effluent limits to improve compliance with the construction storm water requirements. EIG makes several suggestions to the EPA: <ul style="list-style-type: none"> • use 305b reports more effectively in tracking data and understanding the (construction) universe • anti-degradation requirements should be enforced, so that a State cannot issue new permits in impaired watersheds • permit requirements should be more stringent for impaired waters and high priority pristine waters We do not have information from CLF for this question.
Have you seen evidence of environmental damage from construction sites? If so, please describe whether these sites are commercial or residential, and whether they are Phase I sites (greater than 5 acres) or Phase II sites (equal to or less than 5 acres).	Peer and EIG report having seen evidence of environmental damage from construction sites. EIG points to recent state water quality reports as evidence of new impairments. We do not have information from CLF for this question.

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Evaluation Question	Finding (NGO)
Do you have particular suggestions for how EPA conducts inspections and enforcement related to its enforcement program for storm water?	All three NGOs point out the fact that the EPA has delegated most of the inspection and enforcement responsibilities to the States. Peer notes a general inability of the States to enforce the storm water requirements and CLF similarly indicates that EPA should be holding States more accountable. CLF cites that Vermont enforces the State storm water program instead of the federal program. EIG advocates the targeted enforcement by EPA of construction companies that are chronic storm water violators.
Do you have particular suggestions for how EPA offers compliance assistance to the construction industry related to storm water requirements?	None of the NGOs strongly supports the compliance assistance program. Peer's opinion is that compliance assistance is not a priority at all. EIG indicates that aggressive enforcement is just as educational as compliance assistance. CLF commends the training program, but makes the following criticisms: <ul style="list-style-type: none"> • Five-acre plus developers tend to be well-heeled and should be able to privately fund compliance costs • The training staff is overtaxed and resources are being taken away from inspection and enforcement work. • BMPs are completely out of date • Compliance liability for erosion control plans should be shifted onto the engineers and designers, which would give them the incentive to develop good BMPs.
Is there any other feedback you would like to offer EPA on its Storm Water program?	Peer and EIG reiterate that the EPA set enforceable effluent limits, which should be measured in terms of discharges per day or by comparing the concentration of sediments above and below the construction site. Peer points out that construction storm water is a point source pollution, and as such BMPs are not adequate requirements (since these are intended for non-point source pollution). We do not have information from CLF for this question.
Are you aware of any citizens' suits that have been filed?	Peer and EIG are aware of several citizens' suits. Peer has been involved in two cases involving the construction of major highways in Tennessee. EIG describes two cases, one in Wisconsin and one in Minnesota, involving permitting issues that applied to Phase I. We do not have information from CLF for this question.